BULLETIN OF

# THE STOUT INSTITUTE

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Twenty-Fifth Annual

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*The*

# STOUT INSTITUTE

ANNOUNCEMENT

TWENTY-FIFTH YEAR

1927–1928

Including the

Announcement of the 1927 Summer Session

*The*

# STOUT INSTITUTE

GENERAL INFORMATION
AND COURSES OF STUDY FOR THE
SCHOOL YEAR INCLUDING
SUMMER SESSION
1927–1928

THE STOUT INSTITUTE BUILDINGS

1. Home Economics Building. Contains foods, clothing, and science laboratories, recitation rooms, Stout Institute library, cafeteria, auditorium, and main offices. 2. Industrial Arts Building. Contains shops, laboratories, recitation rooms, armory, and power plant. 3. Gymnasium Building. Contains gymnasium, swimming pool, clubrooms, and bowling alleys. 4. Trade Building. Contains shops and drafting rooms. The three dormitories, practice cottage, infirmary, and athletic field are not shown.

# ANNOUNCEMENT

FOR THE TWENTY-FIFTH ANNUAL SESSION AND
TWENTY-SECOND SUMMER SESSION

OF

# THE STOUT INSTITUTE

MENOMONIE, WISCONSIN

1927–1928

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## OFFICERS OF ADMINISTRATION

BURTON E. NELSON, President of The Stout Institute.
CLYDE A. BOWMAN,
Director School of Industrial Arts and Summer Session.
RUTH MICHAELS, Director School of Household Arts.
GEORGE F. MILLER, Director of Physical Education.
GRACE M. DOW, Director of Halls and Housing.
GRACE I. MAC ARTHUR, Preceptress Tainter Hall Annex.
FREDA M. BACHMAN, Preceptress Lynwood Hall.
DELLA A. PAYNE, Director of Cafeteria.
CLARE MARIE WANGEN, School Nurse.
MARY LILLIAN FROGGATT, Librarian.
_____, Assistant Librarian.
B. M. FUNK, Business Manager.
J. T. BURNS, Chief Engineer.
ADELAIDE C. FRENCH, Secretary.
MYRTLE M. BLETSOE, Registrar and Appointment Clerk.
MINA M. IRISH, Stenographer.
ELSIE L. RICHERT, Stenographer.

## BOARD OF TRUSTEES

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JOHN CALLAHAN,
State Superintendent of Public Instruction, Madison
VOYTA WRABETZ,
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WILLIAM F. DETTINGER, Hixton

Secretary:

GEORGE P. HAMBRECHT, Madison

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## CALENDAR FOR 1927–1928

Twenty-second Annual Summer Session begins June 20, 1927.
Summer Session ends August 19, 1927.
Twenty-fifth Regular Session begins September 6, 1927.
Holiday Vacation begins December 17, 1927.
Classes Resume January 3, 1928.
First Semester ends January 20, 1928.
Second Semester begins January 23, 1928.
Twenty-fourth Regular Session ends May 25, 1928.

# FACULTY

## INSTRUCTORS FOR THE SCHOOL YEAR

BURTON E. NELSON, President.
Pennsylvania State Normal School, 1884; B. S. Western Normal College, 1891; M. S., 1895; High School Principal four years; Superintendent City Schools, Lewiston, Illinois, seven years; Superintendent City Schools, Lincoln, Illinois, four years; Superintendent City Schools, Racine, Wisconsin, fourteen years; President, The Stout Institute, 1923—

FREDA M. BACHMAN, Microbiology, Community Hygiene.
Miami University, Oxford, Ohio, 1907 A. B.; 1908 M. A.; University of Wisconsin, Fellow in Botany 1908–1909; Assistant in Botany and Plant Pathology 1909–1912, Ph. D.; Milwaukee Downer College, Asst. Prof. Botany and Bacteriology, 1912–1914; University of Wisconsin, Instructor in Agricultural Bacteriology, 1914–1924; Stout Institute, 1924—

HILDA BALERUD, Physical Training for Women.
Battle Creek College of Physical Education 1923; La Crosse State Normal School, Specialized Department in Physical Education, Diploma 1926; American Institute of Normal Methods, Summer Session 1926, Music; The Stout Institute 1926—

NELLE A. BASS, English, Public Speaking.
Penn College School of Expression 1919–1920; State University of Iowa, Summer 1922; Penn College, Oskaloosa, Iowa, B. A. 1925; Graduate study at State University of Iowa, Summer 1925; and State University of Wisconsin, Summer 1926; Teacher in Public Schools, Iowa, 1918–1920; Teacher in Grade Schools and Dramatic Coach in High School, Bussey, Iowa, 1920–1922; Teacher of English and Dramatics, High School, Monroe, Iowa, 1922–1923; Student Assistant in Speech Department, Penn College, 1924–1925; Teacher of English and Dramatic Coach, High School, Oskaloosa, Iowa, 1925–1926; The Stout Institute, 1926—

BERTHA BLANCHARD, Foods in Summer Session.
Simmons College, B. S. 1923; Teachers College, Columbia University, M. A. 1924; Teacher, High School, Holmen, Wis., 1917–1919; High School, Oconomowoc, Wis., 1919–1921; High School, Kenosha, Wis., 1924–1925; Ottawa University, Ottawa, Kansas, 1925–1926; The Stout Institute, 1927—

CLARA LOUISE BOUGHTON, Supervision of Practice Teaching in Foods.
State Normal School, Milwaukee, 1890–1893; Stout Institute Diploma, 1910; Stout Institute B. S. in Household Arts, 1921; Teacher in Public Schools, Manitowoc, 1893–1909; Director of Domestic Science, Racine, 1910–1911; Stout Institute, 1911—

CLYDE A. BOWMAN, Administrative Problems, Organization of Industrial Arts.
River Falls, Wis., State Normal, 1907; Stout Institute, January, 1909; Columbia University Bachelor of Science Degree and Professional Diploma in Supervision of Industrial Arts, 1915; Graduate Work Columbia University, 1916, 1919, University of

Wisconsin, M. S. 1927; Summer Sessions Stout Institute, 1907, 1908, 1909, 1911, 1913; University of Wisconsin 1912; Columbia University, 1915; Shop Instructor, El Paso, Texas, 1909; Director Manual Arts, City Schools, Stillwater, Minnesota, 1909–1911; Director Department Manual Arts, State Normal, Stevens Point, Wisconsin, 1911–1914, 1915–1916 (leave of absence 1914–1915); Instructor and Associate Adviser in Industrial Arts, Teachers College, Columbia University, New York City, 1916–1919; Stout Institute, 1919—

ARTHUR G. BROWN, Psychology Lesson Plans.
Macalester College, 1914, B. S.; Stout Institute, Summer Session, 1914; University of Chicago, Summer Session, 1919. Instructor of Manual Arts and Athletic Coach, City Schools, Le Sueur, Minnesota, Two Years, and City Schools, Bottineau, North Dakota, One Year; Director of Athletics and Head of Department of Manual Arts, Forestry State Normal School, Bottineau, North Dakota, Four Years. Stout Institute, 1920—

GERTRUDE L. CALLAHAN, Contemporary Literature.
State Normal School, Oshkosh, 1910; University of Chicago, Ph. B., 1912; University of Wisconsin, Ph. M., 1927; Teacher of English in High School, Waupun, Wisconsin, 1913–1915; Teacher of English in Senior High School, Jamestown, North Dakota, 1916–1918; Instructor in English, University of Wisconsin, 1919–1920; Teacher of English in South Division High School, Milwaukee, 1920–1922; Teacher of English in East Side High School, Madison, 1923–1925; Instructor in English, University of Wisconsin, 1925–1927; Stout Institute, 1927—

MARGARET WINNONA CRUISE, Nutrition.
University of Toronto, Toronto, Canada, B. A., 1912; Columbia University, M. A., 1918; Summer Sessions, University of Chicago, 1925, 1926, 1927; Teacher in Public Schools, Port Dover, Ontario, 1905–1907; Dietitian, Johns Hopkins Hospital, 1912–1913; Head, School of Household Science, Mount Allison College, Sackville, N. B., 1913–1915; Lecturer of Household Science, University of Toronto, 1915–1917; Instructor of Dietetics and Household Science, Oregon State College, 1918–1920; Lecturer of Nutrition and Household Science, MacDonald College, McGill University, Ste. Anne, Que., 1921–1926; The Stout Institute, 1927—

FRED L. CURRAN, Supervision of Practice Teaching, Teaching Industrial Arts, History of Education.
State Normal School, Stevens Point, Wisconsin, 1905; Stout Institute, Diploma 1909; B. S. 1921; Bradley Polytechnic Institute, Summers, 1908, 1909. Teacher in Public Schools, 1898, 1903; Principal State Graded Schools, 1905–1907; Stout Institute, 1908—

HATTY R. DAHLBERG, Foods.
Stout Institute diploma, 1906. Teachers College, Columbia University, B. S., 1915. Teachers College, Columbia University, M. A. 1918. University of Wisconsin, Summer Session, 1915. Teachers College, Columbia University, special courses, 1923. Supervisor, Household Arts, High School, 1906–1909. Stout Institute, 1909–1913. Supervisor, Household Arts, Madison, Wisconsin, 1916–1917. Supervisor, Teacher Training, Oregon Agricultural College, 1918–1923. Instructor, Household Arts, University of Pittsburgh, Summer Session, 1918. The Stout Institute, 1924—

WALTER B. DAVISON, History, Economics.
State Normal School, Superior, Wis., 1906; University of Wisconsin, B. A., 1908; University of Wisconsin, M. A., 1911; University of Wisconsin, Summer, 1921; University of Minnesota, Summer, 1924; Head of Department of Social Studies, Blaine High School, Superior, Wis., 1909–1910; Director of Civics, Indianapolis Schools, Indianapolis, Ind., 1910–1914; Head of Department of History and Social Science, State Normal School, River Falls, Wis., 1914–1926; Stout Institute, 1926—

GRACE ELLA DEXTER, Clothing and Costume Design in Summer Session.
University of Illinois, 1911, A. B.; University of Illinois, 1912, 1913, 1916, 1917; University of Chicago, 1925, M. A.; Teacher in High School, Homer, Illinois, 1913–1916; Instructor in Clothing and Textiles, Kansas State Normal School, Emporia, Kansas, 1917–1921; Instructor in Clothing and Costume Design, The Stout Institute, summer, 1921; Instructor in Clothing and Textiles, Lindenwood College, St. Charles, Missouri, 1921–1923; Instructor in Clothing and Design, Indiana University, 1925–1926; The Stout Institute, Summer School, 1926—

JOHN FAVILLE, JR., History, English, School Publications.
Beloit College, B. A., 1921; University of Wisconsin, Summer Session, 1924; Instructor in English and Coach of Debate, Oshkosh High School, 1924–1925; The Stout Institute, 1925—

LILLIAN MARY FROGGATT, Library Organization and Administration.
University of Wisconsin, B. A., 1911. Library School of the University of Wisconsin, 1920. High School Instructor, 1911–1919. Teacher Librarian, High School, Burlington, Wisconsin, 1921–1923. Cataloger, Public Library, Racine, Wisconsin, 1920–1921. Teacher, Courses in Library Methods, State Normal School, Oshkosh, Wisconsin, 1922. The Stout Institute, 1924—

H. F. GOOD, Auto Mechanics, Electrical Work, Materials of Construction.
Iowa State College, B. S. in Electrical Engineering, 1913; B. S. in Agricultural Engineering, 1914. Instructor in Agricultural Engineering, Dunn County School of Agriculture, 1914–1918; Special Training in Gas Engines, Tractors, and Automobiles, with Four Years of Practical Experience; Foreman of Construction Work in Electric Railway Shops, one and one-half years. Stout Institute, 1918—

DANIEL GREEN, Machine Drafting, Machine Shop.
Whitewater, Wisconsin, State Normal, 1900–1902; Mechanical Engineering, University of Wisconsin, 1902–1905; B. S. Degree, University of Chicago, 1914; Instructor and director of shop work and drawing, Des Moines, Iowa, Louisville, Kentucky, Marquette, Michigan, and Elgin, Illinois, 1906–1917; Head of Department of Industrial Education, State Normal School, Macomb, Illinois, 1917–1918; Assistant Superintendent, Midland Chemical Company, Argo, Illinois, 1918–1922; Director Vocational Education, Richmond, Indiana, 1922–1924; The Stout Institute, 1924—

C. W. HAGUE, Printing.
Practical Printer, Seven Years Experience. Hamline University, 1912–1913; University of Wisconsin, Summer Session, 1915; Lawrence College, 1914–1917, B. A. Degree. Seven Weeks at

Intertype Factory School, Brooklyn, N. Y., Summer 1922, Certificate. One Year's Experience Teaching Drafting and Applied Mathematics for Electricians, School of Engineering of Milwaukee; One Year as Instructor of Printing, Vocational School, Appleton, Wisconsin; U. S. Radio School, Harvard University, Cambridge, Massachusetts, 1918; Stout Institute, 1919—

H. M. HANSEN, Advanced Woodwork.
Stout Institute, 1915. University of Wisconsin, Summer Session, 1919. Forest Products Laboratory, Special Courses, 1920–1923. Building Trades Experience 16 years; (Knapp Stout Lumber Company one year. Carpentry, two years. Sash and Door, Planing Mill and Cabinetwork, four years. Patternmaking and Machineshop, one year. Drafting, one year. In the Contracting Business six years. Building Superintendence, one year.) Vocational School Instruction, (Saturdays) two years. Stout Institute, 1912—

THOMAS W. JOHNSTON, Woodturning, Sheet Metal.
University of Illinois, 1908–1910; Bradley Polytechnic Institute, 1910–1912; Columbia University, 1916, B. S.; Special Work in University of Wisconsin, and Washington University, St. Louis, Missouri; Head, Manual Training Department, Public Schools, Washington, Iowa, 1911; Instructor, Manual Training, Industrial School, Pittsburgh, Pennsylvania, 1913; Instructor, High School, Duluth, Minnesota, 1918–1920; Instructor, Grade and High Schools, St. Louis, Missouri 1914–1918, 1920–1922; The Stout Institute, 1926—

MRS. CORDELIA KENT, Home Management, Laundering, Supervision of Practice Cottage.
University of Oklahoma B. S. and diploma, 1921; Graduate study, University of Oklahoma, 1922; Graduate Study, University of Chicago, Summer Sessions, 1921–1923; Teacher in Public Schools Lamar, Colorado, 1911–1914; Teacher in Public Schools, Oklahoma 1915–1920; Instructor in Cookery, State Normal, Weatherford, Oklahoma, Summer Sessions, 1919–1920; Household Management, Child Welfare, Supervision of Practice Cottage, University of Oklahoma, 1921–1923; The Stout Institute, 1923—

FLOYD KEITH, General Metals, Sheet Metal.
River Falls Normal diploma advanced course, 1915; Stout Institute, B. S. Degree, 1922; Three Summers Playground Work, Winnipeg; Five Years Wisconsin High Schools; Stout Institute, 1922—

RAY F. KRANZUSCH, Auto Mechanics, Radio and Home Mechanics.
The Stout Institute, First Scholarship, 1920–1921. Journeyman Electrical Construction and Repair, Five and One-half Years; Instructor in Electrical, Auto Mechanics, and Radio, Sheboygan High School, Sheboygan Vocational School, 1921–1924; Electrical, Auto Mechanics, Radio, and Home Mechanics Summer Session Stout Institute, 1923; The Stout Institute, 1924—

MABEL H. LEEDOM, Chemistry.
City Normal School, Dayton, Ohio, 1894; Stout Institute Diploma, 1910; Columbia University, Summer Session, 1913; Teachers College, Columbia University, B. S., 1919, Graduate study, Columbia University, Summer Session, 1920. Teacher in Public Schools, Dayton, Ohio, 1895–1905; Stout Institute, 1910–1918; 1920—

JEANNETTE LITTLEJOHN, Chemistry.
University of Arkansas, B. A., 1921; Iowa State Agricultural College, Ames, Iowa, M. S., 1923. Graduate Assistant in Chemistry Department, Iowa State College, 1920–1922. Stout Institute, 1923—

MARY M. McCALMONT, Chemistry.
Westminster College, New Wilmington, Pennsylvania, B. S.; Graduate Student, University of Omaha, Nebraska, 1911; University of Wisconsin, 1911–1912, M. S. 1921; Teacher in Public Schools, 1906–1907; Principal of High School and Supervisor of Music, Woodville, Ohio, 1907–1909; City Schools, Omaha, Nebraska, 1909–1911; Stout Institute, 1912—

MARY I. McFADDEN, Psychology, Sociology.
State Normal School, Oshkosh, 1897; University of Wisconsin, Ph. B., 1900; A. M., 1907; University of Chicago, Ph. M., 1901; Teachers College, Columbia University, January, 1908–June, 1908. Teacher, Grand Rapids High School, 1891–1892; Principal, Menomonee Falls High School, 1892–1893; Assistant Principal, Oconto High School, 1893–1895; Associate Supervisor of Practice, Oshkosh Normal School, 1901–1906; Acting Assistant Professor of Education, University of Kansas, One Semester, 1906–1908; Principal Muskegon City Normal School, 1909–1910; Supervisor of Practice, Teacher of Pedagogy and Music, Sauk County Training School, 1911–1912; Stout Institute, 1912—

RUTH MICHAELS, Organization of Home Economics, Technique of Teaching.
State Normal School, Milwaukee, 1902; Stout Institute, 1905; University of Chicago, Ph. B., 1922; Columbia University, M. A., 1923; Instructor, Normal School, Cape Girardeau, Mo., 1905–1907; Head, Foods Department, Cape Girardeau, 1907–1911; Instructor, Foods Department, Iowa State College, 1911–1913; Assistant Professor and Supervisor of Practice Teaching, Iowa State College, 1913–1915; Head, Home Economics Department, State College, Stillwater, Okla., 1915–1916; Dean, Home Economics Division, State College, Stillwater, Okla., 1916–1921; Assistant Professor, Home Economics, University of Pennsylvania, 1923–1927; The Stout Institute, 1927—

GEORGE F. MILLER, Physical Training, Swimming and Athletics.
Normal College, N. A. G. U., Indianapolis, 1912; School for Athletic Coaches, University of Illinois, 1913; Diploma Harvard University School of Physical Education, 1914. Camp Athletic Director, 31st Division, Camp Wheeler, Macon, Georgia, Summer, 1917; School for Athletic Coaches, University of Wisconsin, 1918; Lecturer on Football, Normal College, Indianapolis, 1919; Instructor, University of California, Summer, 1924; Athletic Director, Evansville, Indiana, Junior and Senior High School, 1912–1917; Stout Institute, 1917—

H. C. MILNES, Machine Shop Practice, Foundry Work, Pattern-making.
Armour Institute, 1904–1906; Columbia University, Summer, 1909; Chicago University Summers, 1910, 1911; Four Years' Practical Work in Machine Trades. Teacher of Manual Arts, Evansville, Indiana, 1909–1916; Stout Institute, 1916—

MAMIE RUSSELL MUTZ, Home Furnishings, Color and Design.
State Normal, Peru, Nebraska, Diploma, 1904; University of Chicago, 1907–1908, Ph. B., 1916; Student Art Institute, Chi-

cago, Saturday classes 1907–1908; Applied Arts Summer School, Chicago, 1920; California School of Fine Arts, 1922–1923; State Normal, Peru, Nebraska, Critic, 1905–1907; Supervisor of Art, Training School, 1908–1911; Director Department of Art, 1911–1922; Colorado State Teachers College, Art Department, Spring and Summer, 1922; Stout Institute, 1923—

PAUL C. NELSON, Elements of Woodwork, Carpentry, and Woodfinishing.
The Stout Institute Summer Sessions 1918, 1919, 1924, 1925, and 1926. Total trade experience eighteen years (Apprenticeship Cabinetmaking and Carpentry, five years. Journeyman Cabinetmaking and Millwork, four and one-half years. Foreman Cabinetmaking and Stair building, four years. Journeyman Carpentry, two and one-half years. Building contracting business, two years.) Instructor Cabinetmaking, Wood Finishing, Carpentry, and Architectural drawing, Vocational School and High School, Racine, Wisconsin, eight years. Evening classes in Cabinetmaking and in trade preparatory and trade extension work in the building trades, six seasons. Elements of Woodwork, The Stout Institute Summer Session 1926, The Stout Institute 1926—

SYLVESTER E. PAULUS, English, Football.
Hanover College, Hanover, Indiana, B. A., 1920; Summer Sessions, University of Illinois, University of Iowa; Athletic Director, Daniel Baker College, Brownwood, Texas, 1920–1921; Instructor, English and History, and Director of Athletics, High School, Nogales, Arizona, 1921–1923; Director, Physical Education and Athletics, High School, Tucson, Arizona, 1923–1927; Stout Institute, 1927—

DELLA A. PAYNE, Cafeteria Management.
Baraboo Business College, Diploma, 1897; Whitewater State Normal, Diploma, 1901; The Stout Institute, Diploma, 1916; Teacher and Ward Principal of Public Schools, Marinette, Wisconsin, 1901–1909; Teacher in Public Schools, Baraboo, Wisconsin, 1909–1914; Lewis Hotel Training School diploma, 1921; Teacher of Cookery, Vocational School, Eau Claire, Wisconsin, 1916–1917; Cafeteria Director of Young Women's Christian Association, St. Paul, Minnesota, 1917–1921; The Stout Institute, 1921—

RUTH MARY PHILLIPS, English Composition, Literature.
University of Wisconsin, B. A., 1904; Graduate Work, University of Wisconsin, 1905, and one Semester, 1909; Teacher in High School, Lodi, Wisconsin, 1904–1905; Teacher in High School, Black River Falls, Wisconsin, 1906–1910; Stout Institute, 1910—

GRACE M. PRICE, Vocational Home Economics Education.
State Normal School, Stevens Point, Wisconsin, Diploma, 1921; University of Chicago, Ph. B., 1924; Summer Sessions, Stevens Point Normal, 1921; Teachers College, Columbia University, 1921; Oregon Agricultural College, Corvallis, Oregon, 1922; University of Chicago, 1923; Teacher in Vocational School, Fond du Lac, Wisconsin, 1921–1922; Head of Home Economics Department, Fond du Lac Vocational School, 1922–1923; Teacher Trainer of Vocational Home Economics Education of Wisconsin State Board of Vocational Education, June, 1924; University of Wisconsin, Summer Session, 1924; The Stout Institute, 1924—

FLORENCE QUILLING, Clothing, Hygiene.
Stout Institute, Diploma, 1911; Chicago University Summer Session, 1915; Stout Institute, B. S. in Household Arts, 1920. Teacher in Public Schools, 1911–1917; County Home Demonstration Agent, Iowa, 1917–1918; Stout Institute, 1920—

J. E. RAY, Architectural Drafting, Bricklaying and Concrete Work.
Williamson Trade School, 1908; Stout Institute and University of Wisconsin Summer Sessions, 1917 and 1918; Stout Institute, 1917; B. S., 1922. Seven Years' Experience as a Journeyman and Foreman Bricklayer in New York, Pennsylvania, New Jersey, Texas, Louisiana, Arizona, California, Michigan and Wisconsin. Stout Institute, 1914—

V. D. ROBERTS, Mathematics and Citizenship in Summer Session.
Kentucky State University, B. M. E. Degree, 1905; Civil Engineer for C. N. O. & A. T. & S. F. Railways, June, 1905 to December, 1909; Highway Bridge Construction in Texas, December, 1909 to September, 1912; Teacher of Science and Director of Athletics, Weatherford High School, Weatherford, Texas, 1912 to 1916; Kentucky State University, M. E. Degree, 1917; Principal, Central School, Somerset, Kentucky, 1917 to 1918; Teacher of Mathematics, Somerset High School, Somerset, Kentucky, 1918 to 1922; Kentucky State University, Summer of 1919; Principal and Superintendent of Stearns Graded and High School, 1922 to 1926; Normal School Extension Faculty of Kentucky and Teacher of Six Week Terms Preparing Rural Teachers, 1920 to 1926; Stout Institute, Summer Session, 1926—

EVA SCANTLEBURY, Home and Social Economics, Principles of Education.
Pratt Institute, Brooklyn, N. Y., School of Household Science and Arts, Diploma, 1911; Teachers College, Columbia University, B. S., 1923; Summer Sessions, University of Oregon, 1917; Teachers College, Columbia University, 1918–1919 and 1922–1923; Summer Sessions, Columbia University, 1920–1921; Teacher in Household Science and Arts, Brunot Hall, Spokane, Washington, 1911–1912; Lincoln School, Spokane, 1912–1914; North Central High School, 1914–1918; Washington State College, Summer Session, 1914; Head of Department of Home Economics, Emma Willard School, Troy, New York, 1919–1922; The Stout Institute, 1923—

MARGARET M. SKINNER, Contemporary Literature.
University of Wisconsin, B. A., 1912; Graduate Work 1914 and Summer Sessions; Teacher of English in High School, Berlin, Wisconsin, 1912–1913; Teacher of English and Critic Teacher in Demonstration High School, School of Education, University of Wisconsin, 1913–1920; Head of English Department, High School, Janesville, Wisconsin, 1920–1921; Stout Institute, 1921—

FLORA SNOWDEN, Clothing, Textiles.
City Normal School, Dayton, Ohio; Summer Schools, Chautauqua, New York; Cook County Normal School, Chicago; Martha's Vineyard, Massachusetts; Teachers College, Columbia University; B. S. and Diploma in Household Arts Education; University of Chicago, January–August, 1919; Teacher in Grade Schools and City Normal School, Dayton, Ohio; Teachers College, Kirksville, Mo., 1913–1918; Stout Institute, 1919—

SUSANNE THOMPSON, Nutrition in Summer Session.
University of Nebraska, B. S. 1913; Teachers College, Columbia University, Summer Session, 1916; University of Chicago, M. S. 1924. Teacher in Public Schools, Denver, Colorado, 1913–1918; Colorado Extension Service, Colorado Agricultural College, 1918–1923; Montana Extension Service, Montana State College, 1924–1926; The Stout Institute, 1927—

F. E. TUSTISON, Mathematics, Science, Home Mechanics.
Graduate Ohio Wesleyan University, 1909; B. S. Summer Session of Chicago University, 1916; Summer Session, Case School of Applied Science, 1917; Practical Experience in Electrical Installation, Motor Testing, and Cabinetmaking. Director of Gymnasium of Shattuck Military Academy, 1909–1910; Instructor of Science, Somerset High School, 1910–1920; Acting Superintendent of Somerset City Schools, 1919; Stout Institute, 1920—

LETTY E. WALSH, Supervision of Practice Teaching in Clothing.
B. A., Iowa State Teachers College, 1915; M. A., and Supervisor of Household Arts Diploma, Columbia University, 1920; Graduate Study, University of Chicago, Summer Session, 1917. Supervisor of Practice Teaching in Home Economics, Iowa State Teachers College, Cedar Falls, Iowa, 1915–1919. Stout Institute, 1920—

CLARE MARIE WANGEN, School Nurse.
State Normal, Cheney, Washington, Diploma, 1913; University of Washington; Conservatory of Music, Whitman College, 1919–1920; The Johns Hopkins School of Nursing, Diploma, 1924; Maryland R. N. 1924; Night Superintendent and Obstetrical Supervisor, Community Hospital, Geneva, Illinois, 1924–1925; Illinois R. N. 1925; Assistant Theoretical Instructor, The Johns Hopkins School of Nursing, 1925–1926; The Johns Hopkins University, 1925–1926; The Stout Institute, 1926—

R. L. WELCH, Courses on the Part-Time School, Vocational Education, Vocational Guidance.
James Millikin University, Department of Engineering, 1908–1911; Department of Industrial Education, 1914–1915; Stout Institute, Summers, 1916, 1917; Bradley Polytechnic Institute, Summer, 1919; Practical Experience in the Metal Trades, Director of Industrial Arts, Somerset, Kentucky, City Schools, 1915–1916; Instructor of Mechanical Engineering, South Dakota State College, 1916–1918; Stout Institute, 1919—

ROY R. VAN DUZEE, Teaching Industrial Arts, Home Mechanics in Summer Session.
Stout Institute diploma 1914, Stout Institute B. S. Degree 1923; Summer Sessions Stout Institute 1914, University of Wisconsin 1915, Columbia University 1916; Instructor Manual Arts and Athletic Coach, City Schools, Bismarck, North Dakota, 1914–1915, Supervisor of Industrial Arts and Athletic Director, City Schools, Minot, North Dakota, 1915–1917, 1919–1922, Director U. S. Post School Beincourt, France, Winter 1918–1919, Supervisor of Industrial Arts, Public Schools, West Allis, Wisconsin, 1923—, Instructor in Organization of Industrial Arts, Methods of Teaching High School Woodwork and Elements of Woodwork, University of Iowa, two terms summer 1926, Stout Institute Summer Session 1927—

# GENERAL INFORMATION

REGULAR SESSION, 1927–1928

## HISTORICAL

Many great educational institutions stand today monuments to family pride, monuments to business success, monuments to individual ambitions. None of these, it would seem, inspired the building of The Stout Institute. The vision of the founder of this institution saw at first only an opportunity to serve the young men and the young women who had no opportunity to attend higher institutions of learning, and who through this school could be prepared to do a better piece of work, develop confidence and self-respect, and maintain a happier home; and through the inculcation of higher ideals and genuine standards of honor and truth, do their full part as honored citizens of their country. That was the original motive back of the founding of this school.

The Stout Institute was the pioneer in the placing of instruction in Industrial Arts and Household Arts in a system of public schools. Menomonie was the first city in America in which Manual Training and Home Economics were made a part of the course in all grades of the public school and high school, and this under the supervision and instruction of The Stout Institute.

During the early experimental years these schools were constantly visited and inspected by educators from the far centers east, west, north, and south. The manual and

household arts began to find their way into other school systems. Teachers had to be supplied. The Stout Institute alone at that time was ready to prepare them. It was, then, in reply to a general demand that The Stout Institute became a training school, the first in America to dedicate itself wholly to the training of teachers of Industrial Arts and Household Arts. It still stands the only—as it was the first—school in this country giving itself wholly to the preparation and training of teachers of Industrial and Household Arts, and certain other occupations closely related to these courses, and for which the standard courses almost equally well prepare these students.

The Stout Institute exists and is here in Menomonie because Menomonie was at one time the great lumber center of the Northwest. It was because of these great lumber interests that James H. Stout came from St. Louis to Menomonie in 1889, and it was these lumber interests which held him here and made him an important factor in the Knapp, Stout and Company, in which connection with the other members of his firm, he amassed a considerable fortune.

But unlike most men with similar opportunity he acquired money not for the sake of money, but for the good that money can be made to do for the betterment of humanity. He was greatly interested in his community, and his city in many ways benefited from his great-heartedness.

It was James H. Stout who had the vision and conceived the purpose and plan of organization of The Stout Institute. It was his success in the lumber business which made it possible for him to at least partially realize his dreams before death unfortunately interrupted his work and cut short a program which would have changed completely the future of the school, and would, without doubt, have left the school amply endowed.

The first building erected contained just two rooms, one given to manual training, and the other to domestic economy, as homemaking work was then termed. The work immediately proved so popular that Mr. Stout erected in 1893 a large building costing in that day of extremely cheap construction, $100,000, and equipped it completely for carrying forward many lines of handwork. This build-

ing served its purpose for only four years, when it was completely destroyed by fire. During the school year 1898–1899 a larger and better building was erected by Mr. Stout as a monument to his faith in the cause he espoused.

Prior to 1903 Mr. Stout's efforts were dedicated to the boys and girls of Menomonie, and all shop and laboratory work was carried forward under the administration of the public schools. In that year, 1903, the character of the school was greatly changed and broadened in scope by the organization of The Stout Training School, and the dedication of its efforts to the training of teachers of Manual and Household Arts.

At this time Lorenzo Dow Harvey, Wisconsin's capable State Superintendent of Public Instruction, nationally recognized as one of the great educational leaders, was made Superintendent of Schools of Menomonie, and President of The Stout Training School. Here began the development of new things in education, the breaking down of century old ideals of education, and the formulating of new standards adapted to all the students of all the schools.

In September, 1903, there were 25 men and women enrolled in the training school. The next year 48 were registered, and in 1905, 98 reported. Three years later, in 1908, there were 197 students enrolled, and in 1913, ten years after this organization and leadership became effective, more than 500 students were in attendance. Early in 1908 another important change came, when through articles of incorporation, The Stout Training School became The Stout Institute, and in the purposes enumerated could be seen the development of a great school.

Mr. James H. Stout died in 1910. This was a heavy loss to the institution. Tangible evidence exists showing that had he lived through another half decade, nearly a million dollars would have gone into expansion. After his death the school would not have survived except for the courageous leadership of Dr. Harvey, who prevailed upon the state of Wisconsin to assume all responsibility for the financing of the school.

It was therefore in 1911 that The Stout Institute became a state school. Since that date it has been administered by the State Board of Vocational Education acting as the

Board of Trustees of The Stout Institute. Under these new conditions the school assumed new obligations, chief of which was to produce a sufficient supply of competent teachers of Industrial Arts and Household Arts for the state. New problems of expansion and specialization had to be met. But the demand for Stout Institute graduates increased so rapidly that a further extension of the courses became imperative. There came now a demand in all of the larger high schools for graduates with four years of college training, and a bachelor's degree. The Stout Institute was not authorized up to this time to go beyond the two-year diploma course. No other school was prepared to furnish such instruction as Stout was able to give. Recognizing that fact, the legislature in 1917 extended the courses to four years and endowed The Stout Institute with degree granting power.

The school continued to grant the two-year diploma because the demand far exceeded the supply of four-year graduates.

In the 1925 catalog the two-year course was omitted and the diploma course became a three-year course. Immediately, however, a higher standard of preparation was required and with the beginning of the school year in September 1926 all shorter courses were discontinued. Freshman students in the fall of 1926 were enrolled on the four-year basis. The detailed schedules of the several phases of the four-year course are given elsewhere in this catalog.

While the larger part of the students enrolled come from Wisconsin, almost every state in the country is represented in the year's enrollment at Stout Institute. Stout graduates are teaching in virtually every state in the Union. They are teaching in Canada, the Canal Zone, Hawaii, Cuba, and the West Indies. Graduates who can be strongly recommended are generally placed before the degrees are granted. The Stout Institute strives not for enrollment but for accomplishment.

## PURPOSE AND ORGANIZATION

The Stout Institute is a state teacher training college administered by the State Board of Vocational Education

sitting as the State Board of Trustees of The Stout Institute. The members of this board consist of the State Superintendent of Public Instruction and a member of the State Industrial Commission, ex-officio members; three employers of labor; three employees; and three members representing agriculture, appointed by the Governor of Wisconsin. The Director of Vocational Education elected by the Board of Vocational Education, acts as Secretary of the Board of Trustees.

The revenues for the support of the Institute are secured through appropriations made by the Legislature of the state biennially, from tuitions paid by students attending from other states, and from definite stipulated fees authorized by legislation. Supplementing these revenues the Institute receives the actual cost of carrying on courses in Vocational Teacher Training. This institution has been designated, by the State Board of Vocational Education, and by the Federal Board for Vocational Education, as the training school in Wisconsin for the training of vocational and part-time teachers under the Smith–Hughes Act.

The average enrollment for the regular session is approximately 600. The institution administers a complete range of courses in household arts and industrial arts. The enrollment of entering freshmen is restricted to a certain number of sections with a given number of students in each section. This keeps the total enrollment within the capacity of the buildings and equipment of the school.

## BUILDINGS AND EQUIPMENT

There are provided, four large, thoroughly equipped buildings, the Household Arts Building, the Industrial Arts Building, the Gymnasium, and the Trade Building. In addition there are also dormitories and a practice cottage and infirmary. The institution represents an investment of over a million and a quarter dollars.

### Industrial Arts Building

The first building to be erected of the group now used for instruction was the Industrial Arts building. It is four

stories high, with light basement containing engine room, storage and work rooms. The ground floor plan is extended to a total area of 76 by 182 feet, and the annex contains the machine shop, general metal shop, and foundry. All of these shops are well equipped.

The first floor contains wood turning shop, patternmaking shop, demonstration room, and department offices. The second floor contains the print shop with connecting rooms, lecture room, exhibit room and home mechanics shops. The third floor contains lecture and recitation rooms, electrical shop, physics laboratory, and wireless room.

The fourth floor is given over entirely to an armory and basketball floor. It has a steel arch trussed roof, providing a full area the size of the main building free from obstructions such as columns or partitions. Seats are banked up at the sides, accommodating eight hundred people conveniently.

### Gymnasium and Natatorium Building

The second building erected in this group was for the Department of Physical Training. The building is 66 by 132 feet, and three stories in height. It contains a very completely equipped gymnasium with running track, measuring room, locker rooms, recreation rooms, and bowling alleys on its west side. Its east side is given over largely to baths and contains a swimming pool, 37 by 87 feet, showers, and a well-arranged series of rooms for Russian and Turkish baths. There are also locker rooms, dressing rooms, and social rooms in the east side of the building. The physical director's office is located near the main entrance.

On the second and third floors of this building are the club rooms for student activities. These are designed to foster social pleasures and good fellowship among the faculty and students. The room on the second floor has been equipped with a billiard table and pool table, settees, rugs, easy chairs, victrola, etc., through the activities of such student organizations as the Stoutonia and, in some cases, thesis work by students. A number of magazines are maintained for the reading table in this room. The room is for the use of the men students and is open each night after school and week-ends. Some student organization is in

charge of the club room each week. The faculty members are advisers. The rooms on the third floor have been equipped with attractive furniture, rugs, a piano, and other furnishings largely through the initiative of the Y. W. C. A. and are available for the social activities of the girls. The religious organizations and literary societies hold their meetings here. A well-equipped kitchenette adjoining adds to the convenience of the room. From time to time class parties are held, making use of all rooms, including the gymnasium floor.

### Building Trades Building

The third building erected for Stout classes was that given over to shops for teaching the building trades. It is 84 by 175 feet and two stories in height. A basement at one end of the building is entirely above grade level and contains the carpentry shop, 36 by 80 feet. The ceiling of this shop is over twenty feet high and the shop is so constructed that a section of the outside wall, 27 by 20 feet, may be removed, making it possible to move a completed building directly to its proper site. At one end of the shop is a lecture balcony. At the other is a lumber balcony. A moist air dry kiln opens from the lumber balcony and extends into the mill, which adjoins the carpentry shop. The mill is very completely equipped with modern woodworking machinery.

A cabinetmaking shop is connected with the mill and provided with heavy benches, veneer press, sash and door clamp, and a complete glue room. The auto mechanics shop, located in the next room is equipped with gasoline engines, automobile motors, burning and running-in machine, lathe, reboring machine, etc., for handling complete auto repairs. The bricklaying shop is on the first floor. On the second floor over the bricklaying shop the auto mechanics electrical work and chassis work are located. The sheet metal shop on the second floor above the auto shop has a complete equipment, including cornice brake, circular shear, burring, turning, and beading machines and proper stakes necessary for carrying on a complete course in sheet metal work.

A middle entrance leads to the second floor corridor and

opens onto a conveniently arranged lecture room. A large shop on this floor is given over to painting and wood finishing, with a varnishing room and fire-proof storage for finishing supplies connected. Two large rooms are equipped for architectural and machine drafting and contain an electric blue-printing outfit.

Elementary manual training is taught in a room especially planned for this work, opening upon this corridor. In addition to its necessary tools and benches, it contains several exhibits and conveniences of interest to the teacher of elementary work.

### Household Arts Building

The last building erected at Stout Institute was planned principally for household arts classes. It is 126 by 228 feet and four stories in height, with a high basement. Two large elevators are provided for students' use, one at each end of the main corridor. They add greatly to the comfort and convenience of those taking work in foods or science.

The Stout Institute library is located in this building on the main floor in the west wing. The room is large, well-lighted, and well-ventilated. In addition to the reading room, there is a magazine alcove, stack room, conference room, cataloging room, and repair room.

The administrative offices are located on the first floor and include the president's office, and those of the secretary, clerks, business manager, registrar, and telephone operator. Household Arts director's offices, reception room, exhibit room, and recitation rooms are also located on this floor.

The Auditorium, located in the east wing of the building, extends up for three stories, with a seating capacity for 800. It is thoroughly equipped as a modern theatre with stage 23 by 50 feet, proscenium arch 32 by 24 feet, decks, fly galleries, and scene loft 50 feet high. There are the usual dressing rooms and lavatories and a stage switchboard controlling all stage and house lights.

The stage equipment includes asbestos drop, picture screen, and both interior and exterior scenery. Special settings for the stage for use in concerts and for lecture

work have been built by Stout students. Attention has been given to acoustics as well as to the decorative effect of such settings. A picture booth contains both stereopticon lantern and motion picture machine. Fire exits have been provided in all directions and are properly illuminated. Six doors open up at the rear for general exit.

Clothing, millinery, textiles, and art rooms occupy most of the second floor. They are supplemented by lecture rooms, fitting rooms, and offices. The girls' rest room is on this floor.

Food and nutrition laboratories occupy most of the third floor, and are supplemented by unit kitchens, dining rooms, pantries and lecture rooms. Several types of kitchen arrangement have been installed in order to illustrate the advantages of each for public school installation.

Chemistry and microbiology laboratories occupy most of the fourth floor. These are well-equipped, well-ventilated, and well-arranged. This floor also contains recitation rooms and a lecture and demonstration room seating 253. A carbon dioxide refrigerating system takes care of refrigerators for this floor as well as the third floor.

## LOCATION

The Stout Institute is located in the city of Menomonie, in western Wisconsin, sixty-six miles east of St. Paul, on the Chicago and North Western Railway. Menomonie is also connected with Mississippi River points by the Chicago, Milwaukee, and St. Paul Railway.

## CURRICULA

Courses are offered in both Schools leading to the Bachelor of Science Degree and the professional diploma in Industrial Arts and Household Arts. These courses require four years of work beyond the regular four-year high school. Upon completion of the four-year course in Industrial Arts or Household Arts a diploma is issued which by statute is made the basis for a life certificate after two years of successful teaching in Wisconsin. This life certifi-

cate legally qualifies the holder to teach the subjects in which training has been taken, in the public schools of the state. The license to teach is issued by the Wisconsin Department of Public Instruction.

Special two-year courses are also offered in the School of Industrial Arts for journeymen who are not high school graduates. A vocational certificate is issued upon the completion of this course and is made the basis of a vocational license issued by the State Department of Vocational Education of Wisconsin, permitting the holder to teach in vocational schools in the state.

## RESIDENCE REQUIREMENTS

No certificate, diploma or degree is issued to any person who has not been a student in residence for at least one year. Four summer sessions are considered the equivalent of one year's residence.

## QUALIFICATIONS FOR ADMISSION

Graduation from an approved high school or equivalent preparation is required for admission to The Stout Institute. A certificate of recommendation, which may be secured from the principal of the high school, and a physician's certificate of good health and physical ability to carry on full work in the Institute should be filed with the secretary as early as possible. These credentials together with a statement of approved rooming arrangements are required before the enrollment shall be considered complete.

For admission to the vocational special course, high school graduation is not required, but letters indicating trade experience are required.

## SPECIAL STUDENTS

All students taking work for credit toward diplomas or degrees are regular students. The Institute urges very strongly that all students enter regular courses and take the work outlined for those courses, even though they may

not be able to stay on for the time required to complete the courses. Students are given special classification only when age and the preparation of the applicant, in the opinion of the president, make such classification expedient and justifiable.

## CREDITS

Students who have had normal or collegiate training are given credit for such of the required work in the Institute courses as they have satisfactorily mastered. Successful experience in teaching before entering Stout Institute may be made the basis upon the recording of certain credentials for exemption from practice teaching. This exemption carries with it the taking of other work in the amount of credit which would otherwise be required in practice teaching. Candidates for advanced credit should present evidence of honorable dismissal from the school from which credit is sought, a certified copy of the standing in each subject for which credit is asked and a copy of the catalog of the school showing the courses taken. Such credentials should be submitted prior to enrollment.

## ENROLLMENT

Persons who plan to enter the Institute should fill out an application for enrollment in advance. Blanks furnished by the Institute will be sent upon request. This enrollment blank, when filled out, should be forwarded to the school together with a health certificate, a certification of good character from the principal of the high school or city superintendent, and a copy of the applicant's high school credits, the latter on the special blank of the Institute. While advance enrollment is not absolutely necessary, it is advisable as the number admitted to beginning classes is limited and advance enrollment insures a place in these limited sections.

## TUITION, REGULAR SESSION

Tuition is free for residents of Wisconsin. The tuition charge for non-residents and the definition of non-residents

is covered in the following quotation from the Wisconsin statutes:—

"Any student attending The Stout Institute who shall not have been a resident of the state for one year next preceding his first admission thereto shall pay a tuition fee of one hundred twenty-four dollars for the school year and a proportionate amount for attendance at the summer session."

Tuition is payable in advance each semester.

## SHOP AND LABORATORY FEES

Fees are charged for shop and laboratory courses to cover the per capita cost of material used by students in these courses. The amount of the fee is given in connection with the outline of each course. In addition to the shop and laboratory fees, students are required to pay for any breakage of equipment or damage to buildings for which they are responsible. Fees are payable registration day at the beginning of each semester and summer session. The fee receipt is to be retained by student to gain admittance to classes. A charge is made for duplicate receipts.

## LIBRARY FEES

A library fee of $3.50 is payable at the beginning of each semester. This is required of each student. For this fee all necessary textbooks are furnished from the loan textbook library without any extra charge to students. The reference library is supplied with standard books needed to supplement textbooks in different subjects.

The reading room is supplied with daily and weekly newspapers, educational, literary, and technical periodicals adapted to the needs of the students and available for their use.

## SPECIAL EXAMINATION FEE

A fee of two dollars is charged for any special, final, individual examination given for the purpose of determining students' credit. The special arrangements for such

examinations and permits are secured with either the Director of the School of Household Arts or the Director of the School of Industrial Arts depending upon the work to be covered in the examination.

## EICHELBERGER SCHOLARSHIPS

The Eichelberger scholarships, four in number, of one hundred dollars each, given at Commencement time to two men and two women, are based upon scholarship, personality, future possibilities, social attitude and accomplishments, and value to the school. The scholarships are granted to students who have a certain high rank and are available in four quarterly payments during the senior year at The Stout Institute. The selection of the candidates is made at the annual Commencement period at the close of the regular session upon the completion of three years of work by the candidates.

## SELF-SUPPORT AND STUDENT AID

While there are opportunities for a limited number of students to earn a part of their expenses while pursuing courses, it should be borne in mind that the courses are designed to require the whole of a student's time and effort, and that the amount of outside work the student will be able to do cannot be great. For this reason students are not encouraged to enter college whose funds are not sufficient to meet their expenses for at least the first year. Expenses here are very low, but the amount of work available is comparatively small.

As far as possible students are employed for extra work about the library, laboratories, and in the cafeteria, and also as janitors. Some opportunities offer themselves outside of school activities. A great deal depends, of course, upon the ability and energy of the individual, and his willingness to do any kind of work. The best places are usually secured by those who have been in college for some time.

The Institute does not undertake to secure places for any student in advance, or guarantee employment. It does,

however, under the Stout Student Association, maintain a Students' Employment Bureau for the benefit of those desiring work, and does all in its power to assist the student who is worthy.

The school operates a Student Loan Fund and makes available aid to needy and deserving students within the limits of the fund. Loans are not made, however, to freshman students, and are made only to those students whose school record in scholarship and deportment recommend them to the Committee on Student Loans. Money from this fund is loaned at five per cent, and the loans are made returnable within one year after the student leaves school.

## FEES FOR TRANSCRIPTS

Each student upon graduation may obtain a certified transcript of the standings earned while in attendance at The Stout Institute. Additional copies are furnished at a charge of one dollar per transcript.

## THE INFIRMARY

The Stout Institute maintains an Infirmary for the care of students, where every detail of sanitation is carefully supervised. A resident registered nurse is always on duty and supervises the health of students throughout the college. The nurse maintains regular office hours in her rooms in the Home Economics Building, where she is easily consulted by students.

A fee of two dollars and fifty cents per semester is charged to all students. This fee insures dispensary service and if necessary, ten days of hospital care. Students rooming in the dormitories will not be charged for meals while at the Infirmary. All other students will be charged at the rate of one dollar per day.

## FEE FOR SCHOOL ACTIVITIES

The Stout Institute offers a wide range for student activities in addition to the regular work of the school. Besides the regular classes in physical education for men and

women, the Institute is represented each year by strong football, basketball, baseball, and track teams. Flourishing glee clubs, one for the men and one for the women, have been maintained for a number of years. The Men's Glee Club frequently makes a short road trip in the spring. The dramatic work of the men and women is combined in the organization called the Manual Arts Players. A permanent Lyceum committee is maintained, operating each school year a five or six number course of the very best talent available. The school paper, The Stoutonia, is published each Friday. The editorial, mechanical, and business management of this paper is handled by students. Numerous social affairs take place throughout the year in the school gymnasium. The school has had a strong band organization each year, membership in which is open to men and women.

All of these organizations through contests, concerts, plays, programs, contribute to the social life of the school. The management of admission, booking, and relationship with various student activities is through the Stout Student Association, the officers of which are elected each fall at a regular, all-school election.

The membership charge, $4.00 per semester, is payable by all students at the time of enrollment at the beginning of each semester. This membership gives to every student of the Institute admission to all athletic events including football, basketball, and baseball, all concerts by student musical organizations including the band, men's glee club, and girls' glee club, productions of the Manual Arts Players, all lyceum entertainments under the supervision of the student association, all student dances given under the auspices of the student association, and the semester's subscription to the student weekly newspaper, the Stoutonia. The Stout Student Association membership has eliminated the necessity for the many former student drives for the financial support for the usual college activities. The only exceptions are the college annual, the Tower, and the religious organizations. The association has added much to the social atmosphere of the school and has systematized and made harmonious all school activities.

## DORMITORIES

Bertha Tainter Hall accommodates about thirty young women. The hall is furnished with all modern conveniences. The rooms are comfortably heated and properly lighted, and standing apart from any other buildings, as it does, occupants are assured of good ventilation.

Tainter Annex accommodates sixty-six young women, and is situated on the same grounds with Bertha Tainter Hall. It is thoroughly suited to the purpose for which it is planned. Each room is sub-divided, separating it into living and sleeping quarters. Each room accommodates two students.

Lynwood Hall accommodates sixty-three students. It was built for the purpose for which it is used and is, in every appointment, adequate and complete. Students living at Lynwood Hall will be required to take all meals at the Stout Cafeteria, one-half block distant. All students rooming at Lynwood Hall will be required to purchase one $5.00 cafeteria coupon book each week. No exception will be made to this requirement.

The charge for a room for the school year of thirty-six weeks, for each student, is $80 to $90, according to size and location of the room. These prices apply to all three dormitories.

In Tainter Hall and Annex the charge for meals and definite amount of laundry work for each student is $6.00 per week.

All non-resident women under 25 years of age are required to live in dormitories so far as the capacity of the dormitories permits.

Sheets, pillow cases, and spreads will be furnished in all dormitories. Students must supply towels and blankets. Blankets will be furnished, however, during the summer session.

Room rent in dormitories is payable by semesters, in advance, at the beginning of each semester.

Board and laundry charges are payable four weeks in advance.

Rooms in dormitories will be available Saturday, September 3, 1927.

## LIVING EXPENSES OUTSIDE DORMITORIES

Accommodations for men and those women not living in dormitories may be secured in the city at varying rates depending upon locations and quality of service. Rooms may be had as low as $2.50 per week per person, and table board may be secured in private homes at $5.50 to $6.50.

## STOUT CAFETERIA

The Stout Institute Cafeteria, located in the east end of the basement of the Household Arts building, was opened in the fall of 1921. It is for the use of the students and faculty at the Institute, and their guests. At present several hundred may be accommodated for three daily meals. The equipment is complete and modern; prices are moderate; the service is adequate; the food and cookery are excellent. The cafeteria proves a convenience and an economy to many students. Students are securing meals for the week at from $5.00 to $6.50. For the school year 1927–1928 the cafeteria opens for breakfast Monday morning, September 5, 1927.

## TEA ROOM

The Stout Tea Room, opened two years ago, is an attractive luncheon or tea room under the management of the director of the cafeteria. It provides simple a la carte service during the late afternoon hours and will prove an inviting place to rest over the tea cups or while enjoying an iced drink and a sandwich. Student and faculty parties are popular here.

## REFUNDS

Students who are compelled to withdraw from the Institute by reason of illness, not due to poor physical condition or ill health existing before entering, are entitled to a refund of tuition from the date when notice of such withdrawal is received to the end of the semester.

Students boarding in the dormitories are also entitled to

a refund of whatever amount has been advanced for board beyond the date when notice of withdrawal is received.

Refund for advance payment of room rent in the dormitories is allowed from the date when the room is again rented. Effort is made to secure an occupant at the earliest date possible.

As books and supplies for which fees are charged have to be bought in advance in quantities necessary to supply the entire enrollment, no refund of fees is made in any case.

## UNIFORMS

Freshman and sophomore women attending the Institute are required to wear uniforms during the daily sessions. Men are required to wear white overalls and jumpers in the woodworking shops, and brown overalls and working shirts in the metal working shops.

All freshmen and sophomores are required to take physical training and must provide themselves with a gymnasium suit for the work.

Circulars and information regarding uniforms and gymnasium suits for women will be sent to all enrolled students.

## COOPERATIVE WORK

An expanding program of opportunity for cooperative work for students in the School of Industrial Arts is available. This work is of two types, teaching and shop experience. In the supervised teaching which all students must take in the professional group opportunity is offered at Stout Institute for such teaching in grades 5 to 12 in the Menomonie Public Schools and in the day and evening classes of the Menomonie Vocational School. Through special arrangements teaching experience in certain other types of schools outside of Menomonie is available for a limited number of students each year. Through having these opportunities in addition to those on the campus all types of teaching positions open to Stout graduates are available for supervised teaching during the training program.

All students in the School of Industrial Arts select certain major and minor lines of work in shop work and drawing. Opportunity for advanced students to spend some time in certain selected industries securing practical production experience is available. The scope of such shop experience and the kinds and types are being constantly expanded. During the school year of 1927–28 such work will be available for students majoring in printing, woodworking, and possibly in certain other lines. The purpose of such work is to give the student modern shop experience in the industry in those phases of the work which are not completely represented on the campus.

## THE DEMAND FOR GRADUATES

The demand for graduates of Stout Institute as teachers and administrators of industrial arts and household arts is steadily increasing year by year. Graduates have taught or are teaching in every state of the Union, with occasional exceptions, and in Canada and Porto Rico. There is an increasing demand for dietitians, lunchroom managers, institutional and social workers. While the officers of the Institute never guarantee positions to students upon graduation, they do everything in their power to assist graduates to positions they are qualified to fill.

The number of schools in which industrial arts and household arts are being taught is rapidly increasing and the demand for well-trained teachers of these subjects is greater than ever before.

The officers of the Institute are glad to recommend teachers to school officials who are seeking competent teachers or directors of vocational schools, of manual training, industrial arts, and household arts. In making recommendations reasonable caution is used to name candidates who by training, temperament, personality, and experience are adapted to the demands of the position to be filled. For the past few years The Stout Institute has been called upon to furnish more teachers than it has been able to supply or willing to recommend.

The authorities of The Stout Institute are making a special appeal to graduates of the two-year diploma course to

return to this institution to complete the work leading to the Bachelor of Science degree. The demand for degree graduates in all grades of schools is becoming more insistent. It is constantly becoming harder to place our two-year people, and the work now demanded in many schools requires the extra preparation.

## REGULAR SESSIONS, ENROLLING

The school year opens September 6, 1927, the first semester closing January 20, 1928. The second semester opens January 23, 1928, and closes May 25, 1928. Students should arrange to enter at the beginning of the school year if possible. When this cannot be done, students may enter at the beginning of the second semester or at the beginning of the summer session.

## ADVANTAGE OF CONTINUOUS ATTENDANCE

By enrolling at the beginning of any summer session and remaining in continuous attendance, a student saves a full year.

All students contemplating attendance at Stout Institute should, if possible, make plans to secure the degree.

Address all correspondence regarding courses of study or general work of the Institute, to

President Burton E. Nelson,
The Stout Institute, Menomonie, Wisconsin.

# GENERAL INFORMATION SUMMER SESSION, 1927

The Twenty-Second Annual Summer Session of The Stout Institute opens June 20, 1927, and closes August 19, 1927. During the summer session, which is a nine-week term, classes are held five days of the week, the week-ends affording opportunity to make use of the recreational facilities of Lake Menomin, Red Cedar River, and vicinity.

In subjects requiring daily recitation during the eighteen-week semester a half credit is secured in the summer except where two recitations per day make it possible to secure full credit. In subjects requiring two or three recitations per week during the eighteen week semester full credit is given during the summer session by lengthening class periods or increasing the number of periods per week.

During the six summer sessions which have been operated since the nine-week term was adopted for the summer session, a number of advantages have been discovered. The regular session being thirty-six weeks in two semesters of eighteen weeks each makes possible the completion of units of work in the summer session which interlock with the regular session without program difficulties. The students who finished the two-year course and have seen fit to make use of summer sessions for the completion of the work for the degree have found the nine week session very convenient. It has been demonstrated also that the nine week session with its opportunity for the completion of the equivalent of one-fourth of a year's work can be handled for a relatively slight increase in expenses. The dates of the nine week session make possible enrollment without loss of time on the part of teachers in vocational schools where the school year runs late. The session closes early enough to allow a return for the earliest fall openings of the school year, thus avoiding some of the difficulties which have arisen where double summer sessions of

six weeks each have been operated. The recreational facilities of Menomonie and its vicinity make a very definite added contribution to the attractiveness of The Stout Institute summer session.

Summer session classes are designed to meet the needs of various groups of people. Former students and graduates of the diploma course have excellent opportunity for taking advanced work for credits towards the degree. Supervisors and teachers of industrial arts or household arts can strengthen their work in technique or in the field of education. All persons interested in special studies related to work in industrial or homemaking courses will find much of interest in the summer schedule. The Stout Institute has been designated by the State Board of Vocational Education as the institution in Wisconsin to receive Federal aid under the Smith–Hughes Law for the preparation of teachers for vocational schools.

Excellent dormitory facilities are available for men and women in the summer session. The Stout Institute also operates its own cafeteria. Rooms and table board may also be secured in the city at various rates depending upon location and quality of service.

The summer session bulletin mailed upon request carries detailed listings of all courses offered in the summer session and specific program schedules.

# COURSES OF STUDY—1927–1928

## Degree and Diploma

The Degree of Bachelor of Science in Industrial Arts is conferred upon students completing the four-year Industrial Arts course and the Degree of Bachelor of Science in Household Arts is conferred upon students completing the four-year Household Arts course. When the completion of the four-year course includes the required professional courses a professional diploma is granted in addition to the Bachelor of Science Degree.

Completion of the vocational special course is recognized by the issuance of the vocational special certificate. This vocational special certificate is made the basis for the issuance of the license by the State Department of Vocational Education of Wisconsin and permits the holder to teach in the vocational schools of the state.

## ADVANCED CREDIT

Advanced credit will be given for equivalent work done in colleges of recognized standing. The question of equivalency will be determined by the faculty committee on advanced credit.

Students seeking credit for work done in other institutions must present evidence of honorable dismissal from such institutions, and a certified record from the institution showing the number of semester hours work in each subject, together with a copy of the catalog, of the institution showing the courses taken.

The hours indicated are semester hours required.

## SCHOOL OF INDUSTRIAL ARTS

### Four-Year Course

Leading to the Bachelor of Science Degree in Industrial Arts, teacher's professional diploma, and special state license.

| First Year | |
|---|---|
| Shop Work and Drawing | 20 |
| Educational Psychology | 5 |
| Hygiene and Safety | 1 |
| English Composition | 5 |
| Contemporary Literature | 1 |
| American History I | 5 |
| Physical Education | 1 |
| | 38 |

| Second Year | |
|---|---|
| Shop Work and Drawing | 20 |
| Principles and Organization of Industrial Arts | 3 |
| Teaching Industrial Arts | 3 |
| Mathematics | 4 |
| Contemporary Literature | 2 |
| Public Speaking | 2 |
| Lesson Plans and Instruction Sheets | 1 |
| Citizenship | 2 |
| Physical Education | 1 |
| | 38 |

The 20 hours of shop work and drawing in the first year consist of eight courses in the following:

Elements of Woodwork, I, II
Sheet Metal I
Electrical Work I
Woodturning I
Machine Shop I
Printing I
Elements of Mechanical Drawing I

The shop work and drawing in the first year is required of all students except those entering with specific journeyman experience in trades. The freshman shop schedule is modified for such men. The selection of shop and drawing work in the second, third, and fourth years is based upon the experience gained in the freshman courses and a detailed analysis of calls for teachers showing the locations and distributions of kinds of work called for and the usual combinations in demand.

Specific selections of shop work for the second year and tentative selections for the shop work for the third and fourth years are made at the close of the freshman year. Such selections are combinations made from the following:

Carpentry I, II, III, IV
Millwork I, II
Cabinetmaking I, II, III, IV
Masonry I, II, III, IV
Home Mechanics I
Auto Mechanics I, II, III
Woodfinishing I, II
Patternmaking I, II, III, IV
Architectural Drawing I, II, III, IV
Furniture Upholstery I
Machine Drawing I, II, III, IV
Foundry I, II, III, IV
Radio (Electrical IV)
General Metal Working I, II
Sheet Metal II, III, IV
Electrical II, III
Woodturning II
Machine Shop II, III, IV
Printing II, III, IV
School Publications I

**Third Year**

| | |
|---|---|
| Shop Work, Drawing, or Design | 10 |
| Psychology II | 2 |
| Vocational Education | 2 |
| Literature Survey | 2 |
| Advanced Composition | 2 |
| Modern History | 3 |
| Vocational Guidance | 2 |
| Observation and Practice Teaching | 4 |
| Sociology | 3 |
| Physics | 5 |
| | 35 |

**Fourth Year**

| | |
|---|---|
| Shop Work and Drawing | 5 |
| Administrative Problems | 2 |
| Materials of Construction | 3 |
| Industrial Chemistry | 5 |
| Economics | 5 |
| Contemporary Literature | 2 |
| Industrial History | 3 |
| Principles of Education | 3 |
| History of Education | 2 |
| Elective Courses | 5 |
| General Science | |
| Child Psychology | |
| The Part-Time School | |
| Part Time Shop Methods I | |
| Contemporary History | |
| Technique of Coaching | |
| | 35 |

A special schedule is provided for journeymen desiring teacher training in preparation for entering teaching in vocational schools. The schedule, designated as the vocational special, is open only to journeymen. Students who are journeymen and also high school graduates may take the work included in the schedule and additional work leading to the Bachelor of Science Degree if they so desire. The arrangement of the schedules for the first two years for the vocational special classification follows:

## Schedules for Students Selecting the Vocational Special Classification

**First Year**

| | |
|---|---|
| Shop and Drawing | 10 |
| English Composition | 5 |
| Public Speaking | 2 |
| Citizenship | 2 |
| History of Labor Movements | 2 |
| Industrial History | 3 |
| Psychology | 5 |
| Principles and Organization of Industrial Arts | 3 |
| Plans and Instruction Sheets | 1 |
| The Part-Time School | 2 |
| | 35 |

**Second Year**

| | |
|---|---|
| Shop and Drawing | 15 |
| Hygiene and Safety | 1 |
| Labor Problems | 3 |
| Social Problems | 2 |
| Economics | 5 |
| Practice Teaching | 2 |
| Part-Time Shop Methods I | 2 |
| Part-Time Shop Methods I | 2 |
| Vocational Guidance | 2 |
| Physical Education | 1 |
| | 35 |

This schedule of work outlined for the Vocational Special student is closely articulated with the certification requirements of the Wisconsin State Board of Vocational Education. These requirements are as follows:

For the purpose of measuring the attainment and the

progress of the Part-Time Schools of the State, the Wisconsin State Board of Vocational Education, with the aid of the directors, has set up certain standards of preparation for each phase of part-time school teaching, and is classifying part-time school teachers on the basis of these standards.

Teachers of Shop Subjects are classified as follows:

### Junior Teachers

The Junior classification is granted to and held by:—

1. All teachers employed in the part-time schools of Wisconsin prior to January 1, 1926, who have not qualified for a higher classification as long as they spend one summer out of every three, or the equivalent in professional improvement along the lines laid down for securing the Senior A classification and approved by the Local Board of Industrial Education and the State Board of Vocational Education. At least six credits must be earned over each *three year period.* The following courses must be taken first:—

1. The Part-Time School and Its Problem..... 2 credits
2. The Teaching of Shop Subjects..... 2 credits

2. All teachers employed in the part-time schools of Wisconsin on or after January 1, 1926 who:—

(a) Are not yet qualified to hold a higher classification.

(b) Have had successful experience in the vocation taught for at least three years beyond the completion of apprenticeship; or the equivalent.

(c) Have agreed to and do improve themselves according to the program outlined for securing Senior A classification, spending at least every alternate summer; or the equivalent, in training approved by the Local Board of Industrial Education and the State Board of Vocational Education. At least six credits must be earned over each two year period. The following courses must be taken first:

1. The Part-Time School and Its Problems..... 2 credits
2. The Teaching of Shop Subjects in the Part-Time School ..... 2 credits

### Senior B. Teachers

The Senior B classification is granted to every teacher of shop subjects who was employed in the part-time schools

of Wisconsin prior to January 1, 1926, and who has not yet qualified for the Senior A classification, whenever he shall have fulfilled the following conditions:—

1. Completion of five years of successful teaching in the part-time schools of Wisconsin in the shop subject for which Senior B classification is asked.

2. Completion of one summer term's work, or the equivalent. At least six credits must be earned in courses approved by the Local Board of Industrial Education and the State Board of Vocational Education. The following courses must be taken first:—

1. The Part-Time School and Its Problems..... 2 credits
2. The Teaching of Shop Subjects in the Part-Time School ..... 2 credits

The Senior B classification will be extended as long as the possessor teaches successfully and spends one summer out of every three in professional improvement along the lines laid down for securing Senior A classification. At least six credits must be earned over each three year period.

## Senior A Teachers

The Senior A classification is granted to every teacher of a shop subject who has fulfilled the following conditions:—

1. Successful experiences in the vocation taught for at least three (3) years beyond the completion of apprenticeship; or the equivalent.

2. Successful teaching experience of not less than (3) years in the part-time schools. One of these three years must have been in Wisconsin.

3. Completion of two (2) years of training in an approved technical or general institution of college rank; or the equivalent.

Note: Time spent by person without practical experience in a trade or technical school learning elementary processes, if counted in on the apprenticeship period mentioned above, cannot be counted here. This two years of school training is to be in addition to the learning of the elementary trade or industrial processes.

4. Completion of the following courses, which may be included in the two years of college training required under (3) above; or the equivalent.

| | |
|---|---|
| The Part-Time School and Its Problems | 2 credits |
| The Teaching of Shop Subjects in the Part-Time School | 2 credits |
| Psychology | 2 credits |
| Vocational Guidance | 2 credits |
| Problems in the Teaching of Shop Subjects in the Part Time School | 2 credits |
| Elementary Economics | 4 credits |

Four additional credits in Economics chosen from the following or similar courses:

| | |
|---|---|
| Labor Problems<br>Labor Legislation<br>Employment Management<br>The Labor Market<br>Industrial and Business Organization and Administration<br>Sociology | 4 credits |

## SCHOOL OF HOUSEHOLD ARTS

### Four-Year Course

Leading to the Bachelor of Science Degree in Household Arts, teacher's diploma, and special state license to teach Home Economics, Physiology, Hygiene and General Science.

| First Year | | Second Year | |
|---|---|---|---|
| Inorganic Chemistry | 8 | Physiology and Hygiene | 3 |
| Educational Psychology | 4 | Microbiology | 4 |
| English Composition | 5 | Organic Chemistry | 4 |
| Contemporary Literature I | 1 | Household Physics | 3 |
| Clothng I and II | 5 | Home Nursing and Child Care. | 3 |
| Foods I and II | 6 | Costume Design | 3 |
| Textiles | 2 | The Family and Society | 3 |
| Color and Design I | 3 | Foods III | 3 |
| Physical Education | 2 | Clothing III | 3 |
| | — | Contemporary Literature | 2 |
| | 36 | Physical Education | 2 |
| | | Laundering | 1 |
| | | Technique of Teaching | 3 |
| | | | — |
| | | | 37 |

All Home Economics sequences for the third and fourth years are subject to the advice and approval of the Director of the School of Household Arts.

| Third Year | | Fourth Year | |
|---|---|---|---|
| Psychology II | 2 | Home Management and Practice House | 5 |
| Nutrition I | 4 | Practice Teaching | 4 |
| Advanced Composition | 2 | Special Methods | 2 |
| Educational Sociology | 3 | Child Study and Training | 3 |
| Home Economics Education | 2 | Principles of Education | 3 |
| Literature Types | 2 | House Planning and Home Furnishing | 4 |
| Industrial History or | 3 | Contemporary Literature IV | 2 |
| Modern History | 3 | Economics | 5 |
| The Part-Time School and Its Problems | 2 | | |

For those students who are primarily interested in teaching Foods and Nutrition the following courses are suggested:

| Third Year | | Fourth Year | |
|---|---|---|---|
| Foods IV | 3 | Physiological Chemistry | 4 |
| Problems in Health Education. | 2 | Bacteriology of Foods | 2 |
| Animal Experimentation | 2 | Nutrition II | 4 |
| Community Hygiene | 4 | Foods V | 4 |
| Quantitative Analysis | 3 | Lunchroom Management | 2 |
| Large Quantity Cookery | 2 | Teaching Physical Education | 2 |
| Public Speaking | 2 | Electives | |
| Citizenship | 2 | | |
| Social Psychology | 3 | | |
| History of Education | 2 | | |
| Child Psychology | 2 | | |
| Electives | | | |

For those students who are primarily interested in teaching Clothing and Related Art the following courses are suggested:

| Third Year | | Fourth Year | |
|---|---|---|---|
| Clothing IV | 2 | Textile Chemistry | 4 |
| Millinery | 2 | Clothing V | 4 |
| Color and Design II | 2 | Art History and Appreciation | 3 |
| Community Hygiene | 4 | Advanced Costume Design | 2 |
| Public Speaking | 2 | Teaching Physical Education | 2 |
| Citizenship | 2 | Electives | |
| Social Psychology | 3 | | |
| History of Education | 2 | | |
| Child Psychology | 2 | | |
| Electives | | | |

For those students who wish the vocational certificate entitling the holder to teach in the vocational schools of Wisconsin, the following courses in Vocational Education must be elected:

| | |
|---|---|
| Part-Time School and Its Problems | 2 |
| Methods of Teaching in Part-Time Schools | 2 |
| Analysis and Organization of Part-Time Schools | 2 |

For those students who are primarily interested in Home Economics supervision and have had successful teaching

experience in Home Economics, choices from the following courses are suggested, subject to modification according to the course previously taken by them.

| Third Year | | Fourth Year | |
|---|---|---|---|
| Survey in Home Economics | 6 | History of Education | 2 |
| Technique of Teaching | 3 | Principles of Education | 3 |
| The Part-Time School and Its Problems | 2 | Economics | 5 |
| Psychology II | 2 | Contemporary Literature | 2 |
| Educational Sociology | 3 | Foods V | 4 |
| Industrial History or Modern History | 3 | House Planning and Home Furnishing | 4 |
| Contemporary Literature | 1 | Clothing V | 4 |
| Literature Types | 2 | Child Study and Training | 3 |
| Advanced Composition | 2 | Vocational Guidance | 2 |
| Household Physics | 3 | Administrative Problems | 2 |
| Costume Design | 3 | Bacteriology of Foods | 2 |
| Psychology of Childhood and Youth | 2 | Lunchroom Management | 2 |
| Public Speaking | 2 | Problems in Related Subject Matter in Clothing | 2 |
| Citizenship | 2 | Teaching Physical Education | 2 |
| Community Hygiene | 4 | | |
| Children's Clothing | 2 | | |
| Girls' Clubs and Their Organization | 2 | | |

For students who are primarily interested in dietitian work and lunchroom management, the following courses are suggested:

| Third Year | | Fourth Year | |
|---|---|---|---|
| Foods IV | 3 | Diet in Disease | 2 |
| Problems in Health Education | 2 | Bacteriology of Foods | 2 |
| Animal Experimentation | 2 | Investigation Cookery | 2 |
| Community Hygiene | 4 | Lunchroom Management | 2 |
| Quantitative Analysis | 3 | Electives | |
| Large Quantity Cookery | 2 | | |
| Electives | | | |

For those students who are primarily interested in work as a Home Economics demonstrator, extension worker, or Home Service consultant, the following courses are suggested:

| Third Year | | Fourth Year | |
|---|---|---|---|
| Psychology II or Child Psychology | 2 | Principles of Education | 3 |
| Advanced Composition | 2 | Home Management and Practice | 5 |
| Literature Types | 2 | History | 5 |
| Educational Sociology | 3 | Economics | 5 |
| Home Nursing and Child Care | 3 | Labor Problems | 3 |
| Nutrition I | 4 | Child Study and Training | 3 |
| Foods IV | 3 | Contemporary Literature | 2 |
| Public Speaking | 2 | School Publications | 2 |
| Citizenship | 2 | Electives | |
| Industrial History | 3 | | |
| Community Hygiene | 4 | | |
| Electives | | | |

# OUTLINE OF COURSES

NOTE:

1st Sem.—Course offered the first semester.

2nd Sem.—Course offered the second semester.

S. S.—Course offered in summer session.

## COURSES IN EDUCATION

### EDUCATIONAL PSYCHOLOGY I

Fundamental principles of psychology and their application to the problems of the classroom constitute the work of this course. The psychology of attention, habit and will are the phases which receive special attention. Principles, both of psychology and pedagogy, are studied and discussed in terms of definite application to concrete teaching problems. 1st Sem.; 2nd Sem.; S. S. Credits 4 or 5

### EDUCATIONAL PSYCHOLOGY II

The student will be asked to keep in mind the fundamental principles taken up in Psychology I. These will be studied in relation to their social and educational significance, and illustrations of these principles will be found in current social and educational problems. Specific modes of conduct will be studied as results of specific mental functioning and as indices of definite mental or social development. The results of such studies will form the basis for working out problems of attack in educational and social development. Prerequisite: Psychology I or its equivalent.

1st Sem.; 2nd Sem. Credits: 2

## PSYCHOLOGY OF CHILDHOOD AND YOUTH

In this course the mental life of a child, as distinguished from the mental life of an adult, is taken up. Among the subjects to be discussed are: sensation as a basis for consciousness; characteristics of children's imagination; proper mental food for children, and how the character of this food must change with each stage of development; children's ethics. Prequisite: Psychology I or its equivalent.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## PRINCIPLES AND ORGANIZATION OF INDUSTRIAL ARTS

Emphasis in this course is placed on the principles underlying the operation of industrial work in American education. A background study is made of the present organization of American education with attention given to the place and function of industrial work. With the scope of the teacher's professional skill recognized under analysis, selection and teaching, special stress is placed upon the work of the industrial teacher in analysis and selection. Attention is given to the present elements in industrial education with a study of the lines of development through which they have come to the present. Exploratory and advanced courses are worked out to include the basic characteristics of such courses. In the industrial teacher's organization of teaching material specific use is made of the various graphic devices.

The relationships existing between vocational guidance and counseling and the industrial teacher's organization of material is covered. Special attention is given to the place of industrial work in full-time and part-time schools and emphasis is placed upon the specific responsibilities of the industrial teacher in the 6–3–3 plan. Six book reports and two occupational analyses are required in addition to the reading and preparation for class recitation.

The two occupational analyses required are based upon the student's major and minor shop and drawing courses. In conjunction with the work in Organization of Industrial Arts the student carries through a definite series of con-

ference assignments in his major and minor shop and drawing work. He meets in conference once a week for eighteen weeks. This is in addition to his regular meetings in class. His assignments of work are in sequence and require a specific record of sound procedure in analysis, selection, and teaching peculiarly fitted to his major and minor lines of work. Prerequisites: Psychology I or its equivalent. It is advisable but not required of the student to have completed Lesson Plans and Instruction Sheets.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## TEACHING INDUSTRIAL AND VOCATIONAL SUBJECTS

The purpose of this course is to bring about a definite realization of the principles of teaching and their application to industrial arts and vocational subjects. The effective organization of subject matter for daily class or shop teaching and the methods of presentation are the phases on which stress is placed. Attention is also called to shop and class management as a factor in efficient instruction.

The scope of the course is as follows: first, a clear, concise statement of the problem of teaching in which the function of the school and the teacher is shown; second, the factors that enter into the teaching process and which must be taken into account by the teacher; third, the fundamental laws of teaching and their application to the industrial arts and vocational school problems; fourth, types of lessons and suggestions offered by each to the industrial arts teacher; fifth, classroom and shop methods, including the organization of subject matter for instructional purposes and the assignment and distribution of students and work during the class period; sixth, standards for testing results of classroom or shop procedure covering systems of grading and the determination of the worth of subject matter and method. Prerequisite: Psychology I.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## TECHNIQUE OF TEACHING

The purposes of this course are to acquaint students with (a) the practical procedures and principles of method fun-

damental for good teaching; (b) recent developments within the field of educational method; (c) those scientific procedures by which the teacher may study her own problems intelligently and continue to grow in service.

The course begins with the study of the aims and purposes of modern education, their relation to the school, the curriculum, and the teacher and the methods of the teacher.

The following topics are among those included: Types of learning and teaching with especial emphasis upon the principles and methods concerned in training in skills, in visual education, problem solving, socializing exercises; the doctrine of interest; the project method; the directed study movement; provision for individual differences, including a study of the Dalton and Winnetka contract plans; diagnostic testing and remedial teaching; measurement of results; grading; moral education; the development of personality; use of textbooks and analysis and study of some well known ones. Prerequisite: Psychology I.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## OBSERVATION AND PRACTICE TEACHING

As a requirement for graduation from the Industrial Arts Department, every student must have at least eighteen weeks of practice teaching. Proof of successful teaching experience may, at the discretion of the head of the department, reduce this requirement. The practice teaching schedule is arranged in periods of nine weeks' duration, thus permitting students to gain experience in two or more different lines of work if it is so desired. All practice work is in connection with the public school system and the local vocational school and covers a wide range of work. The teaching is done under the direct supervision of the special teacher of the subject in which the instruction is given. Before taking charge of any class the student teacher must prepare and submit for criticism a lesson plan indicating clearly what is to be done and the proper order of procedure for each day's work.

Before beginning practice teaching, and as a preparation for it, the student observes the work of experienced teachers and every teacher in the Institute bears in mind that

it is his work to train his students to teach, as well as for him to do good teaching. In doing this, he calls attention to his mode of presentation of subject matter; to the pedagogical principles he applies in his class work, and to the manner in which the application is made; and to what modifications in methods of applying these principles must be made to adapt the instruction to the capabilities of less mature students. The student, as he comes in contact with different teachers, and in his class work in different subjects, is thus consciously observing the work of skilled teachers and studying the art of teaching, through the concrete application of important pedagogical principles in the teaching of a wide range of subjects.

As a requirement for graduation from the Household Arts Department, every student must have from twelve to eighteen weeks of practice teaching, including both food and clothing work. The teaching is preceded by a series of observation lessons which form the basis for discussion in the observation class.

The teaching is done in the Menomonie public, parochial and vocational schools and ranges from fifth grade sewing to fourth year high school dietetics and household management.

The work in this department is planned, directed, and supervised by two supervisors of practice teaching. Detailed lesson plans are required for each lesson taught and these must be approved by the supervisor before the lesson is given. Personal consultation and conferences between the student teacher and the supervisors after each lesson, strengthen the work and give direction and guidance when it is most needed. This work is open to students classified as Juniors or Seniors.

1st Sem.; 2nd Sem. Credits: 4

## A TEACHERS' COURSE IN SPECIAL METHODS

This course is required of all students who desire to teach home economics and parallels their observation and supervised teaching. It includes the study of aims, an analysis of subject matter, and a discussion of methods of presentation and laboratory procedure directly applicable

to the practice classes. Actual experiences in the classroom are reported upon and evaluated to give each student a broader understanding of the objectives and attainments realized in the various grades.

1st Sem.; 2nd Sem. Credits: 2

## THE PART-TIME SCHOOL

This is a general acquaintance course in the history, theory, purpose, organization, and administration of the part-time school. The following points will be considered: (1) History and development of the part-time school both in Europe and America with special attention given to the Wisconsin; (2) Federal and State laws affecting the part-time schools; (3) The type of pupils in the part-time schools and their needs; (4) Desirable characteristics of the part-time school teacher; (5) The work of the coordinator; (6) Home contacts; (7) Health problems; (8) Cooperation with outside organizations; (9) Cooperation with the Industrial Commission and Rehabilitation Division; (10) The planning and care of equipment.

1st Sem.; S. S. Credits: 2

## METHODS OF TEACHING SHOP SUBJECTS IN THE PART-TIME SCHOOL I

Recognized principles of teaching will be applied to typical shop situations as found in the part-time school, taking into consideration the peculiarities of *time* and *organization.* These methods of teaching will be based upon the psychological aspects of learning as applied to both shop and related subjects. Among the topics considered will be (1) the use of the lesson plan and job sheet; (2) the demonstration, both for the whole class and for the smaller group; (3) individual practice, the follow-up on the demonstration; (4) assignment of reading and observation; (5) the notebook and note taking; (6) the lecture or class talk; (7) reports by pupils; (8) questioning; (9) checking and testing, examinations; (10) the use of models, charts, graphs and diagrams; (11) the use of pictures of various kinds; (12) shop hygiene and safety; (13) management,

routine, detail, and discipline; (14) tool room procedure; (15) the maintenance of tools, apparatus and equipment; and (16) the selection, care and purchase of supplies.

1st Sem.; S. S. Credits: 2

## METHODS OF TEACHING SHOP SUBJECTS IN THE PART-TIME SCHOOL II

A selection will be made from the work done by the individual students in their course in Principles and Organization of Industrial Arts of at least eighteen (18) units, jobs or processes, which would be suitable for teaching in the typical part-time school. After this selection has been approved each student will complete for each one of his eighteen units, the necessary sort of instruction sheet together with suitable drawings. After these units of work have been accepted permission will be given to all the students to exchange copies of their work; by this means each man may secure a set of teaching material ready for immediate use in the part-time school as well as the ability to prepare such material.

2nd Sem.; S. S. Credits: 2

## I. THE ANALYSIS AND ORGANIZATION OF HOME ECONOMICS IN THE PART-TIME SCHOOL

This course consists of the following: a viewpoint of the part-time school curriculum; a survey and study of home making charts; analysis and survey of the needs of the part-time school girl; an original analysis of one home making subject; organization of content of the course; short unit course of nine lessons; and formulation of general and specific aims for the course.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## II. METHODS OF TEACHING HOME ECONOMICS IN THE PART-TIME SCHOOL

Consideration of the difficulties involved in teaching home making in the part-time school is included in this course. It also takes up the different methods of instruc-

tion as adapted to part-time school instruction. A comparative study and critical analysis of material that can be used for texts will be made. It also includes evaluation of reference material, educational exhibits, charts and bulletins. Problem solving will be stressed in connection with teachers' plans and pupils' instruction sheets.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## VOCATIONAL EDUCATION

The emphasis in this course is placed upon the growth and development of industrial education and upon studies of specific types of schools, their purposes, and organization. Lectures, assigned readings, and individual reports are utilized to these ends. The outline of the work covered is as follows: (1) History and development of the industrial education movement in the United States, including the influence of European systems, causes for its rapid growth in the United States, defining of terms growing out of the development, and analyses of the various purposes of the different movements; (2) Study of specific types of schools, their purposes and organization, including the trade, general industrial, part-time, apprentice, corporation, co-operative, junior and senior high schools, with their resultant demands on the industrial teacher and his training; (3) Analysis of industrial organization to orient vocational school work, and the vocational guidance implications; (4) Recent progress in vocational education as indicated in an analytical study of typical current practice; state and national legislation, and surveys.

1st Sem.; S. S. Credits: 2

## VOCATIONAL GUIDANCE

This course will give (1) the rise and development of the movement, with some attention given to foreign progress; (2) a study of surveys and their application to the problem; (3) an analysis and evaluation of the use of intelligence and trade tests; (4) a careful consideration of personnel functions and administration, both in education and in business and industry; and (5) the preparation and

classification of occupational information for use in guidance and placement. This material will be presented through assigned reading, lectures and the preparation of term papers. 2nd Sem.; S. S. Credits: 2

## PRINCIPLES OF EDUCATION

This course is intended to serve as an introduction to, and an evaluation of contemporary educational theory and practice. The work consists of reference reading, reports and discussions on the various aims of education; analyses of different subjects with reference to educational values; place of subjects in the curriculum; the organized and unorganized educational agencies, their contact with the individual and the manner in which he is most helpfully affected by them; present day criticisms of education; contemporary educational reforms and practices.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## HISTORY OF EDUCATION

This course is intended to give teachers the background for a better understanding of present day education. A large portion of the course deals with the development of education in America, but enough time is given to European school systems since the Middle Ages to furnish a proper setting for the work as it developed in this country. Throughout the course the emphasis is placed on the relations between educational development and social, political and industrial conditions rather than upon isolated facts.

The following topics are suggestive of the work covered: development of elementary schools in the Middle Ages; elementary school curricula textbooks, equipment, teachers, and methods before the nineteenth century; transition to secular point of view in educational theory; the Latin Grammar Schools of England and America; development of academies in England and America; the educational revival and the work of Horace Mann; development of public high schools, evening schools, vocational schools, and special schools. Open to students of junior or senior rank.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## ADMINISTRATIVE PROBLEMS

This course includes a survey of the problems of educational administration of interest and value to executives and teachers in vocational education and practical arts. The following topics represent the types of work covered: Systems of organization in public schools and higher institutions indicating the operating responsibilities and functional assignments; the measurement of efficiency of teachers and supervising staffs with methods of improvement of teachers in service; maintaining and developing the teacher's professional skill in analysis, selection, and teaching; the furthering and perfecting of the functioning of the school system with the community through continuous survey; the school budget and financial administration; the maintaining and controlling of buildings and equipment. Prerequisites: Principles and Organization of Industrial Arts or equivalent, Vocational Education.

2nd Sem.; S. S. Credits: 2

## HOME ECONOMICS EDUCATION

The topics considered in this course are: the aims and purposes of Home Economics work in the schools; place in the curriculum; relation to various schemes of school organization, such as elementary, junior and senior high, rural, and part-time schools; courses of study in different types of schools, based on the aims of the school and the needs of the girl; equipment, its selection, purchase, cost and care; cost of maintenance of department; business management. The special teacher is considered from the point of view of her training, personality, relations with other teachers and with other people in the community, attitude toward principal and superintendent. The work consists of lectures and class discussions.

Prerequisite: Educational Psychology I, Technique of Teaching. 1st Sem.; 2nd Sem. Credits: 2

## SURVEY COURSE IN HOME ECONOMICS

The teacher who has been in the field for several years is likely to feel herself growing rusty in both subject matter and methods, or at least she finds that it is difficult to keep abreast of the new ideas in educational procedure. When she returns to college her first thought is to get in touch with the most recent educational theories related to her subject.

This course is planned to meet the needs of just such people. It will consist of lectures with assigned reading designed to give up-to-date information. The newest books on the various phases of Home Economics, recent pamphlet and bulletin material, kinds and sources of illustrative material, modern agencies cooperating with and contributing to Home Economics subject matter will be made known to students. Courses of study from many schools will be consulted to note changing concepts and objectives in Home Economics.

The topics covered in this survey will be Foods, Clothing, Home Management, Family Relationships, Nutrition. The Nutrition Survey course will be a two hour credit course. Each of the others will be a one-hour credit course. Students may elect one or more units as they desire.

Prerequisite: Home Economics teaching.

S. S.; 2nd Sem. Credits: 6

# COURSES IN ECONOMICS AND SOCIOLOGY

## ECONOMICS

This course is designed to meet the needs of students who desire a clearer understanding of modern economic life and its problems. It comprises a study of fundamental principles in the consumption, production, distribution, and exchange of wealth; the outstanding characteristics of the present economic order, fundamental concepts in the science of economics, the place of economics among the other social studies; consumption and standards of living; production organization and practices; distribution and its problems; business organization and management; problems of regulation and control; credit and banking; problems of labor; economic reform and human welfare.

1st Sem.; 2nd Sem.; S. S. Credits: 5

## EDUCATIONAL SOCIOLOGY

The aim of this course is to secure such knowledge of sociological principles as will enable the student to study intelligently the present conditions in society falling under these principles. This will involve the study of conditions under which society has developed and how these conditions have been modified in the past and may be still further modified in the future for the betterment of the individual in society. Prerequisite: Citizenship.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## CITIZENSHIP

The aim of this course is to develop a knowledge of what is essential for high quality American citizenship. It will consider not only the privileges and opportunities resulting from citizenship, but will take into account and emphasize the reciprocal duties and obligations involved in citizen-

ship. As ours is a government by the people, the individual's responsibility in this government will be studied with care. As ours is a government of the people and for the people, the rights of the people under that government will also be considered. Local government is stressed, but it is not forgotten that our national government is still active and operating.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## THE FAMILY AND SOCIETY

The following course aims to interpret to students their opportunities and responsibilities as modern women. They supply a certain historic background, together with necessary current data, and deal with personal and social problems.

The object of this course is the development, through reading and discussion, of practical ideals of living especially as related to the family group. With this end in view the family is studied in its primitive forms and traced through history up to modern times. The modern family is studied sympathetically, and at the same time subjected to a critical analysis. Current social movements making for the betterment of these conditions are considered, such as those resulting in appropriate legislation, the establishment of special courts, education for home-making, and the development and popularization of adequate ideals.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## CHILD STUDY AND TRAINING

This course is designed to give an appreciation and understanding of child life, first from the standpoint of society and the larger needs and rights of all children, and then in relation to the home and the child's life within the home. A study is made of current movements for child betterment, including such agencies as the Children's Bureau, The Child Welfare Bureau, the Child Health Organization, the child labor legislation, juvenile courts and playgrounds, the nursery school movement, and recent experi-

mental work along educational lines with children of pre-school age. The function of the mother as an educator and companion is considered as well as the importance of wise parenthood and the need of training for parenthood. Throughout the course an added appreciation of childhood is given an opportunity for development, through non-technical literature as well as through the more technical reference material, and by means of individual problems, and a limited amount of group work. Actual contact is made with child life, in the children's homes, through story hours, amusement problems, caretaking, or in some cases health and behavior problems; in addition to a weekly laboratory period at the school which is devoted to the observation and study of these same children, under nursery school conditions. 1st Sem.; 2nd Sem.; S. S. Credits: 3

## GIRLS' CLUBS AND THEIR ORGANIZATION

This course deals with those problems involved in the successful organization and effective guidance of the work of junior girls' clubs. The following general subjects will be studied: qualifications for leadership, the needs and interests of adolescent girls, ideals and plans of work of established national organizations such as Girl Scouts, Girl Reserves, and Camp Fire Girls, and the added opportunities for the teacher in this kind of extra-curricular contact with girls.

Students will be expected to purchase manuals and some reference material and to share expenses incurred in camping cookery and camp activities. S. S. Credits: 2

# COURSES IN SCIENCE AND MATHEMATICS

## MATHEMATICS

In Mathematics I, such portions of geometry, algebra, and logarithms as are useful to the teacher of Industrial Arts are studied and then application in industrial operations taught. Instruction is also given in the use of the slide rule.

It is the object of Mathematics II not only to master the principles of plane trigonometry, but to use these laws in the solution of shop problems.

1st Sem.; 2nd Sem.; S. S. Credits: 4

## PHYSICS I

Mechanics, Heat, and Electricity. Three recitations and two laboratory periods per week. The practical application of general physical laws is stressed. These laws are worked out in special laboratory problems, or demonstrated by apparatus or machines in actual use. The content of the course is applicable to the needs of prospective teachers in Industrial Arts or the Sciences.

Prerequisites: Mathematics I and II.

Fee: $5.00 Sem. 1st Sem.; 2nd Sem.; S. S. Credits 5

## HOUSEHOLD PHYSICS

The purpose of this course is to teach the principles of physics applicable in the use and care of the equipment of homes, schools, and institutions. The laws of heat, electricity, and mechanics are practically applied. The course deals with heat units, heat conduction and insulation, ventilation, refrigeration, thermostatic control, general house heating, pressure cooking, electrical lighting appliances, fuses, electric motors, meter reading, and general mechanics and upkeep of the common machines found in the household.

Fee: $5.00 Sem. 1st Sem.; 2nd Sem.; S. S. Credits: 3

## CHEMISTRY I (I. A.)

General Chemistry applied to Industrial Arts. Three recitations and two laboratory periods per week.

The course treats the subject from the practical standpoint and through lectures, demonstrations, and laboratory work endeavors to present scientific information pertaining to the common industrial arts materials. During a study of the fundamentals of chemistry, a study is made of the following: The corrosion and oxidation of metals; the preservation of metals; the composition and setting reactions of mortar and cement; the chemistry of hard water and the methods of softening; blue printing; characteristics of the various irons and steels; chemistry of acetylene and acetylene welding; chemistry of fuels; chemistry of paints and oils; chemistry of the storage battery; preservation of wood.

It is possible that additional work will be offered in the further application of chemistry to the field of industrial arts in the year of 1928–1929.

Fee: $8.00. 1st Sem.; 2nd Sem.; S. S. Credits: 5

## MATERIALS OF CONSTRUCTION

The work in this course is organized around the materials of the machine and building trades. Standard and special tests are carried out with the following materials: various grades of iron and steel; building materials such as cement, concrete, stone, and brick; woods of various kinds; types of construction involving wood and metal; holding power of glues, screws, nails, and other fasteners; foundry materials such as molding and core sands and binders; rubber, leather, and cotton belting. Prerequisites: Physics I and Mathematics.

Fee: $1.00 2nd Sem.; S. S. Credits: 3

## INORGANIC CHEMISTRY I

In this course it is proposed to teach the chemical viewpoint of matter, to give definite meaning to necessary technical terms, and to teach accuracy in scientific work. The course includes the fundamental theories and laws con-

cerned in chemical reactions and the study of some of the non-metallic elements. Laboratory experiments supplement the recitation work. The laboratory manual has been compiled to emphasize the above features. A course in high school chemistry is very desirable.

Fee: $8.00 Sem. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## INORGANIC CHEMISTRY II

The aim of this course is to complete the foundation in inorganic chemistry begun in the previous course. The remainder of the non-metallic elements and the metals are studied. In this course, special emphasis is laid, wherever possible, upon household processes. The recitations which are based on the same text used in the previous course, are supplemented by laboratory work taken from the manual used in the former course and also one in qualitative analysis.

Fee: $8.00 Sem. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## ORGANIC CHEMISTRY

The purpose of this course is to give the fundamental chemical knowledge necessary for an understanding of household processes involved in cleaning and in cookery and the chemical composition of foods. The course consists of recitation and laboratory work. A brief outline of the course includes: hydrocarbons, as related to fuels and dry cleaning; alcohols, especially the one involved in bread making; acids, as related to the study of fats, vinegar, fruits, and vegetables; esters, as used for flavorings; fats, carboyhydrates, and proteins, as to occurrence, composition, and reactions; disinfectants; preservatives; patent medicines. Emphasis is constantly placed on the practical and professional side of the study. The points brought out in class discussions have applications to high school cookery, food study, and chemistry, as well as to household management, physiology, and home nursing. Prerequisites are courses in Inorganic Chemistry I and II, and Foods I.

Fee: $5.00 Sem. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## QUANTITATIVE ANALYSIS

This is a course in quantitative analysis with special reference to teaching standard volumetric and gravimetric methods. These methods are applied in the ordinary examination of types of food products. Included in the analysis are milk, cream, syrups, oils, and fats.

Prerequisites: Inorganic Chemistry I and II; Organic Chemistry.

Fee: $10.00 2nd Sem.; on demand. Credits: 3

## PHYSIOLOGICAL CHEMISTRY

This course presents the essential chemical facts pertaining to life processes. The composition and nutrition of the physical units of organization, i. e. cells, are studied in connection with processes of maintenance, repair, and growth in plants and animals. The laboratory work includes experiments and demonstrations on fermentation; respiration; salivary, gastric, pancreatic, and intestinal digestion; absorption; tissue composition and function; excretion; and a qualitative urinalysis.

Prerequisites: Inorganic Chemistry I and II, Organic Chemistry.

Fee: $8.00 1st Sem.; S. S. Credits: 4

## TEXTILE CHEMISTRY

This course includes the identification by means of the microscope of fibres and substitute materials, the chemical examination of fibres, including tests to determine content of cloth, and adulteration; the classification and application of dyestuffs; home problems in dyeing; the quantitative determination of adulterants; the removal of stains; and the proper use of materials in relation to cleansing and laundering.

Lecture work and recitations accompany the reference work assigned for study and give basis for the laboratory experiments. Prerequisites: Inorganic Chemistry I and II and Organic Chemistry.

Fee: $10.00 2nd Sem.; S. S. Credits: 3

## MICROBIOLOGY

The subject matter of this course deals with the influence of such micro-organisms as bacteria, yeasts, and molds upon home and every-day life. The bacteriological problems of personal and public hygiene and sanitation are considered in both laboratory and classroom, and are closely related to the work in the Household Arts. The course is prefaced by a brief review of the principles governing physiology, modified to serve the needs of students as a preparation for their study of micro-organisms which affect the home. In this introductory course, such topics are considered as: the general nature of organisms, composition of protoplasm, structures of a living cell, the processes of respiration, digestion, growth, reproduction, and sex hygiene instruction. The common household molds are then discussed as to morphology, growth, reproduction, use, and control; work on the yeasts follows, and attention is directed to the general nature of the yeast plant, conditions favorable for its growth and reproduction, the utility of yeasts. Bacteria are next studied, and their structure, mode of development and reproduction are discussed. The useful and harmful effects of bacteria are considered and emphasis is placed upon the influence of these organisms in relation to food preservation, the nitrogen cycle, the arts and industries, water and milk supplies, immunity and disease. Prerequisites: Chemistry I.

Fee: $5.00 1st Sem.; 2nd Sem.; S. S. Credits: 4

## BACTERIOLOGY OF FOODS

This course deals with the problems of biology as related to food manufacture, food spoilage, food preservation, and food poisoning. The number and kinds of organisms in various foods are determined, means of introduction of such organisms and the changes produced by them.

Fee: $5.00 1st Sem.; on demand. Credits: 2 or 3

# COURSES IN HISTORY

## AMERICAN HISTORY

The purpose of this course is to give the student a familiarity with American history in order that he may understand why American political, social, and economic life is what it is today. It is a brief survey course covering the period from 1789, on, and emphasizing the political aspect of history because it is felt that the basic facts of American progress are best brought out through this angle. The attempt is made to free the student's mind from prejudices and from preconceived and unfounded notions concerning historical facts so that his future thought on the various social studies may be stimulated in the right direction.

1st Sem.; 2nd Sem.; S. S. Credits: 5

## MODERN HISTORY

The purpose of this course is to acquaint the student with the most significant events and movements in world history during the past century. It aims to reveal the historical background of contemporary life and to assist the student in understanding himself as a unit in the great stream of progress. The following topics suggest the scope of the course: typical features of life under The Old Regimé; the French Revolution and Democracy; the Napoleonic Regime, the struggle between liberalism and conservatism in various European countries since the Congress of Vienna; unifying movements in Germany and Italy; the Industrial Revolution and its effects; the development of the British Empire and other colonial powers; Russia, Turkey and the Near East; conditions and factors preceding the Great War.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## INDUSTRIAL HISTORY

This is an advanced course in American History confining its consideration as much as possible to the industrial changes in the past which have lead to the present industrial system. History is not neglected, but the present industrial situation is analyzed as the important project of the course. The attempt is made to prepare a background for the course in economics. Detailed consideration is given to such divisions of the work as: the industrial revolutions; the western movement and its relation to industry; inventions; tariffs; finance; capital and labor; immigration; conservation; and others.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## CONTEMPORARY HISTORY

An intelligent and judicial understanding of present day social, political, and economic questions is the aim of this course. It takes the world point of view, emphasizing, however, America's part and place in the world order. A thorough understanding of American and European history is prerequisite to a complete comprehension of the topics covered. These units of study include such problems as: Permanent Peace, and the contemporary events affecting that ideal; Social Movements, such as modern race problems and crime conditions; modern expressions of the age-old contest between traditionalism and liberalism. Typical events studied and argued in 1927 were: Mexican and Nicaraguan situations; the Chinese Revolution, the St. Lawrence Waterway project; Philippine Independence; War Debt Settlements; and many others.

1st Sem.; 2nd Sem. Credits: 5

# COURSES IN ENGLISH

All the work given in English is made as practical as possible. A student attending The Stout Institute is preparing himself for a highly specialized vocation; he is interested in English courses because they offer drill in the adequate expression of his ideas and help him to acquire familiarity with good books and not for literary training.

The composition courses emphasize the importance of correct, clear, and forcible expressions, through a study of unity, coherence, and simple rhetorical principles in sentences, paragraphs, and themes; they offer definite preparation for future needs. The literature courses are so arranged that they keep the student reading during his entire school career; they emphasize technique and skill in the process of reading, they broaden and deepen reading interests, and they develop appreciation and some critical taste.

## PREPARATORY COMPOSITION

*Preparatory Composition* offers no credit but is required of students who prove, after suitable preliminary tests, to be inadequately prepared to carry the regular first-year course in composition. Drill will be given in the fundamentals of sentence structure and of punctuation, in spelling, in grammar, and in correct usage; this will be supplemented by individual conferences and specialized assignments. Given as required. No credit

## ENGLISH COMPOSITION

*English Composition* is required of all students entering The Stout Institute. Presentation of such phases of work as will give the student a command, both in speaking and writing, of simple, correct, and cleancut English is the aim of the course. Class exercises are correlated with work

in other departments, and great emphasis is placed throughout the college on the professional value of simple and clear English.

The first week's work is given over to a rapid review of the elementary essentials of grammar, spelling, punctuation, and organization of material. Students are then grouped according to their proficiency. Those not admitted to the regular course are put into special sections for further drill on these mechanics of correct expression. (See Preparatory Composition.) The rest of the regular course in composition deals with the various phases of speaking and writing most helpful to college students. A week's drill on the use of library facilities is given by the Institute librarian, the effective use of outlines is stressed; exercises to enlarge vocabulary and to make for precision of expression are frequent. The last weeks are spent on the writing of a long theme which serves as a definite review of all points covered by the course.

1st Sem.; 2nd Sem. Credits: 5

## ADVANCED COMPOSITION

The aim of this course is to offer opportunities for practice in varied types of writing adapted to prospective teachers. A review of the fundamentals in writing is given covering vocabulary study, sentence and paragraph construction, organization, and topical and sentence outlines. Special attention is directed to the composition and style for announcements, reports, articles, and letters for publication. A study of magazine articles and reviews of them in written and oral form is the basis of some class work. The course deals mainly with the organization and logical presentation of material; weekly themes and a final long paper are required. Prerequisite: English Composition.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## SPEECH—CORRECTION

Students evidencing speech handicaps will be given special drill throughout the semester. Both functional and organic disorders will be considered including such defects

as stuttering, delayed speech, monotonous speech, foreign accent, nasality, slurring, slovenly speech, and those defects caused by malformation of the vocal apparatus. Students placed in this group will be scheduled for a definite period of individual drill and help each week.

Given as required. No Credit

## USAGE DRILL GROUPS

As the need arises, small groups of students needing drill in some phase of English mechanics will be organized. No student is exempt from this sort of work; he may be assigned to it by any member of the faculty at any time during his entire school career.

Given as required. No Credit

## LITERARY TYPES

The purpose of this course is to give a general survey of both English and American Literature through the study of lyric and narrative poetry, the study of the drama, of the essay, of the short story, of the novel and of biography as forms of literature. An analysis and brief history of each of these types is presented and lists of readings are submitted. The contrasts and comparisons between the classic and modern style in these writings are emphasized. Individual and group interpretations are presented through readings and critical reports both oral and written. Personal reactions are made of prime importance. Definite lists of poems, four dramas, fifteen essays, twelve short stories, and three novels are required readings; others are optional. The grade in the course is determined by the amount of work done as well as by its quality.

Prerequisite: Contemporary Literature I, IIa, and IIb.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## PUBLIC SPEAKING

The aim of this course is to present as far as possible the fundamental requirements for ordinary public speaking. The nature of the work is threefold: mechanical, interpre-

tive, and constructive. The mechanics include such technique as is necessary for a foundation. The interpretive phase consists in interpreting orally the words of another. Most of the work is given over to the constructive or practical side, preparing the student to meet with poise and ease the opportunity to talk before large or small groups. With this in view wise selection of subject matter, skillful outlining, and clear convincing delivery are stressed. Memorized, extempore and impromptu speeches are required. Constructive criticism, both by instructor and students, is given a prominent place. Prerequisite: English Composition. 1st Sem.; 2nd Sem.; S. S. Credits: 2

## CONTEMPORARY LITERATURE

Contemporary Literature is given to develop an interest in the reading of good books and to train the student's critical ability and habits of reading in a way likely to be helpful and productive after his college days are over. The student's interests will be made the basis of his book selection, but the purpose of the work will be to broaden and direct these interests in a practical, educational way. Through his own reading, each student will come into direct contact with all types of literature and will build up constructive ideas of each. The classwork will aim to develop facility and accuracy of expression through oral and written reports of reading done during the week. Classes meet once a week and are small enough to permit each student to report. Five separate units of work are offered:

I, a. Study of reading skills and habits; analysis of each student's reading technique and interests; survey of worthwhile materials for reading and their correct use; reports on reading.

II, a. Study of sources of reading information likely to be helpful to the average adult; analysis of good book reviews; reports on reading.

II, b. Study of books of all types with emphasis on *fiction* materials and acquaintance with leading writers of today in all fields; reports on reading.

IV, a. Selection of some twenty modern problems by class; discussion of each in class based on fact and fiction reading of students.

IV, b. Selection by each student of an individual topic, usually directly connected with his previous reading; preparation of full and accurate bibliography upon it; presentation of this to the class as a seminar report.

1st Sem.; 2nd Sem.; S. S. Credits: 1 for each unit

# COURSES IN SANITATION, HEALTH, PHYSICAL EDUCATION, AND COACHING

## HYGIENE AND SAFETY

This course treats the subject from the standpoint of school hygiene. Topics are developed to include lighting, heating, ventilation, plumbing, seating, planning the shop, etc. Safety undertakes to give the student knowledge of fundamentals relating to the care and safety of pupils and includes fire and fire prevention, electrical hazards, safeguards for machinery and their operation, proper clothing, etc. 1st Sem.; 2nd Sem.; S. S. Credit: 1

## PHYSIOLOGY AND HYGIENE

This course is planned for the purpose of teaching, (a) the structure and function of the body, organs, and tissues; (b) personal hygiene and individual health; (c) public hygiene and general health; (d) physiology and hygiene in relation to the school child. A textbook is used, supplemented by reference work. The subject of sex hygiene is given in a series of lectures by the instructor. Organization and presentation of subject matter and vital present-day school problems of hygiene are discussed.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## PHYSICAL EDUCATION I FOR MEN

This course is planned for the development of coordination and muscular control as well as corrective purposes. A wide range of floor work is given including marching, tactics, free exercises with and without hand apparatus, games and contests. Light and heavy apparatus as well as mat work is included. A free swimming period usually concludes the lesson.

Fee: $2.00 Credit: 1

## PHYSICAL EDUCATION II FOR MEN

The work in this course is a progression from the fundamental to the more advanced phases of physical activity and includes tactics of the higher order, a more complicated series of hand apparatus exercises and advanced heavy apparatus work. Mat and tumbling as well as Pyramid work is included. Swimming will continue as in Physical Education I and in addition work in life saving and resuscitation will be given. Students may take the Red Cross Life Saving Test which leads to the certificate of Qualified Red Cross Life Guards.

Fee: $2.00 Credit: 1

## TECHNIQUE OF COACHING

In keeping with the policy of expanding the athletic program the Institute has adopted the freshman rule which makes scheduling games with leading colleges and universities possible. Freshmen will now be given special consideration, and when not engaged in contests with like teams, will be used in scrimmage with the regular varsity.

The Technique of Coaching course will cover both football and basketball, the student being made thoroughly familiar with the correct technique of the different fundamentals and finally the more advanced methods of team play. Problems of organization, development and administration are covered in the theoretical work of the course. Actual experience in handling the squad will be given, students coaching the different class organizations and freshman teams. Prerequisite: Physical Education I, II.

This course as given during the summer session will allow the student to concentrate on either football or basketball or both. A large part of the time will be devoted to field or floor work, the student having the opportunity of observing as well as participating in the work of developing fundamentals, the moulding into team play and finally the more specialized types and features of the game. These two courses will come at different times of the day, thus avoiding conflict.

Fee: $2.00

1st Sem.; 2nd Sem.; S. S. Credits: 1½ or 2

## SWIMMING

Although the pool is used largely for recreational purposes, during regular class work, special attention will be given those unable to swim. Swimming in the summer session offers a refreshing sport at the close of the day's work and a large number of students qualify for the American Red Cross Life Saving certificate, theory and practice of which is taught at this time.

## PHYSICAL EDUCATION FOR WOMEN

Physical Education is required of all students throughout their Freshmen and Sophomore years. The aims of the work are to develop good posture; maintain and improve health; maintain and develop physical efficiency; a prerequisite to mental efficiency; provide wholesome and clean recreation; provide and promote athletics for all; and to insist upon regular exercise for every young woman. Class-work is given in group gymnastics, marching tactics, field hockey, basketball, volley ball, indoor baseball, swimming and folk dancing. Outdoor sports and hiking are stressed.

Fee: $2.00 1st Sem.; 2nd Sem. Credit: 1

## INTRA-MURAL SPORTS

Teams are organized to represent classes in field hockey, basketball, volley ball, swimming, indoor baseball and tennis. Games are played and meets are held under the supervision of the Women's Athletic Association.

## TEACHING PHYSICAL EDUCATION

Many calls come for teachers who can combine gymnasium and basketball coaching with home economics work, especially in small high schools. This course is designed to fit the student to take charge of gymnasium classes in Junior and Senior High Schools. The student is given material for use in all grades, such as free exercises,

marching tactics, singing games, games for gymnasium, classroom and playground, and gymnastic and folk dancing. Opportunity is given the student to do practice teaching, besides coaching and refereeing basketball for girls. Prerequisite: Two years of college gymnasium.

Fee: $2.00 1st Sem.; 2nd Sem. Credits: 2

## HOME NURSING AND CHILD CARE

The work in home nursing aims to give a practical knowledge for the general care of cases of illness in the home which do not demand professional nursing skill, and of accidents and emergencies which may occur in the home, schoolroom, or elsewhere. Theory is supplemented by demonstrations and practical work wherever feasible. Work is given in the choosing of a series of lessons suitable for various classes of pupils such as public and part-time school classes.

The work in child care aims to give to the student most approved methods of physical care of the child based on the results of scientific studies of child life. Hygienic clothes for the infant, care of the clothes, regularity of habits, handling and bathing the infant are among the topics considered in the course.

1st Sem.; 2nd Sem.; S. S. Credits: 3

## COMMUNITY HYGIENE

This course deals with problems concerning the conservation and promotion of the health of a community. It includes such hygienic work as study of a pure water supply, sewage disposal, milk and food inspection, control of infectious diseases, health organization, child welfare movements, industrial hygiene, village improvement association, and health exhibits.

The laboratory work consists of analysis of water and milk supplies; methods of water purification; study of organisms causing food poisoning; bacteriological methods of diagnosing typhoid, diphtheria, and tuberculosis; and practice in accumulation and interpretation of statistics.

The health conditions of different local food supplies are investigated and graded. Fumigation and the action of disinfectants on disease organisms are carefully studied in classroom and laboratory. Training is given to enable the student to assist in promoting public health movements by her knowledge and cooperation in every locality where her work may fall, either in health laboratories or through education. Prerequisite: Microbiology.

Fee: $5.00 2nd Sem.; S. S. Credits: 4

# COURSES IN SHOP WORK AND DRAWING

Fees are indicated for quarter (9 weeks) or semester (18 weeks). Roman numerals indicate 9 week steps in advancement.

The shop work and drawing in the first and second years will include six or more subjects, to be determined by the director. The work offered in the third and fourth years will be specialization in the shop work taken in the first and second years or new work.

## CREDITS FOR SHOP AND DRAWING COURSES

Each course here listed requires at least two and one-half semester hours of work and two and one-half credits are granted for completion. Most of the courses have an additional two and one-half semester hours of work open for those who desire it. In some courses five additional semester hours are possible. Full credit is granted for the full number of semester hours taken.

## DRAWING

### ELEMENTS OF MECHANICAL DRAWING

This course is composed of 20 drawings; 2 tracings starting with lining and compass work, conventions, geometric drawing, orthographic projection developments, isometric drawing, working drawings, test problems, sketching, detailing, and assembled drawings. A time limit is placed on all drawings. Daily lettering exercise is carried on until a very good grade of lettering is possible. Some sheet metal problems are given, and cabinet drawing in full size details. Organizing courses for high schools and voca-

tional schools is discussed. The line of travel for a draftsman desiring special kinds of work is given consideration. Outside assignments are studied and reported upon. All work is given with the idea of enabling a student to express himself in the graphic language regardless of what kind of work he is in.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ sem. hrs. qtr.

## ARCHITECTURAL DRAFTING

Architectural Drafting I consists of details during the first part of the course, starting wth the footings and working up through the house as it is built, such as cellar window details, sills, double-hung windows, casements, cornices, stairs, fireplaces. After details are made the planning of a small residence is taken up drawing the first floor plan, second floor plan, elevations, etc. This course is a prerequisite for Arch. II. Elements of Mechanical drawing is a prerequisite for Arch. I.

In Architectural Drafting II a complete set of plans is made including details, perspective, specifications, rough estimate, quantity survey, etc. Plans are made from small freehand sketches—allowing considerable range of thought during the course of planning. Only approximate sizes of rooms are given. The design may be carried out in the English, Colonial, Italian, Georgian or Spanish periods if it is practical. Reference reading is required during the course, and reports are made in class. Lectures are given on building construction from time to time giving the student a good idea of practical building details. Good drafting practice is emphasized throughout the course. Pen and ink rendering and water coloring of perspectives is given to those capable of handling this work.

Architectural Drafting III consists of a set of plans, details, specifications, etc., designed by the student. Plans are traced in colored inks and put up in the best manner. Full sized details are drawn such as wall sections, etc. Model making is taken up at this time and each student is required to make a model of his house rendering it in suitable water-colors and landscaping; making of models for

demonstration purposes is studied at this time. Considerable outside work is required to do justice to the interesting study of model making.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ each qtr.

## ARCHITECTURAL DRAFTING IV

This course follows I, II, and III and plans are made of a small bank, apartment building, or school building or a small Vocational School building. This gives the student much study concerning the planning of rooms, size of machinery, etc., line of travel through the shops for various courses. Perspective or model is made.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ sem. hrs. each qtr.

## MACHINE DRAFTING I

Machine Drafting I requires that the student have a working knowledge of drafting technique, of basic mathematics and of the principles of orthographic projection and working drawings as embodied in Elements of Mechanical Drawing or its equivalent.

A brief study is made of practical machine drawing conventions including screw threads, bolts, nuts, screws, piping and rivets. Practical problems are assigned which will involve the use of these conventions in such a manner as will conform to standard practice.

A number of mechanical elements are then presented for the student to draft in conformity with accepted practice. The problems are chosen and arranged to present a regular progression of material from the elementary to the more complex. These problems will be presented through written data, perspectives, type forms, tables, formulas and students sketching from machine parts.

This procedure will involve the use of sketches, sections, details, assembly drawings, material lists and hand books.

Text—French: Engineering Drawing.

## MACHINE DRAFTING II

Machine Drafting II will be an application in individual problems of the working knowledge obtained in Machine

Drafting I. Each student will have an opportunity to draft a simple machine or appliance using accepted standards. The use of hand books and manufacturer's catalogs for obtaining data will be encouraged. Production problems in connection with the manufacturing of the appliance or machine, will be considered, and jigs and fixtures will be planned by the student in connection with his problem.

Text—French: Engineering Drawing.

## MACHINE DRAFTING III

Machine Drafting III will deal with various types of cams and gears. The simpler forms of motion—uniform, uniformly accelerated and retarded, and simple harmonic—will be analyzed and made use of in the planning of cams to produce these motions. The course will include a study of plate and cylindrical cams with various types of followers. The involute system of gearing will be treated in connection with problems in spur gears, racks, annular gears, bevel gears, and the worm and worm wheel. An elementary study of helical gears will be made.

Text—Keown: Mechanism.

## MACHINE DRAFTING IV

Machine Drafting IV will involve a consideration of mechanical perspective, particularly in its relation to the delineation of mechanical elements and appliances.

No text.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

# WOODWORK AND BUILDING TRADES

## ELEMENTS OF WOODWORK

This work is for the distinct purpose of acquainting the students with the correct use and care of the fundamental bench woodworking tools, with the various materials used, and with the basic working and construction methods employed in woodwork.

The following outline is suggestive of the work included in the course: I. Tool fitting: a. Jointing, setting, and filing of rip and cross-cut saws, b. Grinding and sharpening of plane blades, chisels, spoke shaves, and other edge-cutting tools, c. Sharpening of augers, bits, and drills, d. Fitting of plane blade caps and of spoke shaves; II. Getting out stock: a. Making lumber bills by "taking off" from drawings and listing all the pieces in approved order, b. Roughing out stock according to the individual lumber bills, c. Squaring up stock; III. Making joints: a. Laying out for construction, b. Making rabbet, dado, and lap joints, c. Making mortise and tenon joints; IV. Special planing: a. Rabbeting and grooving, b. Chamfering and molding; V. Basic constructions: a. Box construction, b. Panel and door construction, c. Drawer construction, d. Mitered post and frame construction; VI. Assembling, a. With nails and screws, b. With glue, c. With special fasteners; VII. Smoothing: a. Appropriate and correct uses of the smooth plane and scraper, spoke shave and file, and coarse or fine sandpaper, b. Finishing straight and curved surfaces, c. Finishing for painting and for staining; VIII. Fitting hinges, locks, and catches; IX. Constructing one major project which requires the study and application of the more important elements taught in the course.

Special outside reading is assigned throughout the course for class discussions and for reports. The assignments cover, in addition to the suggested outline, such topics as lumber, glue, nails, screws and other materials, projects suited for school work, and general school shop problems.

Fee: $3.50 qtr. 1st Sem.; 2nd Sem. Cr.: 2½ each qtr.

## WOOD TURNING I

The aim of this course is to familiarize the student with fundamental tool processes, types of turning and the care of Wood Turning tools and equipment. Exercises and projects are used to teach the proper use of tools in making cylindrical, tapered, concave, convex, combination curves, V, end and shoulder cuts. The different types of Turning include spindle, face-plate, chuck, mandrel, and combinations of these. Projects such as various kinds of handles, candle sticks, vases, trays, small lamps, etc., are involved in this course.

Fee: $3.50

1st Sem.; 2nd Sem.; S. S. Cr.: 2½ sem. hrs. qtr.

## WOOD TURNING II

This is a continuation of Wood Turning I with emphasis on the following:—1. Designing of project. Relation to present types of Furniture and uses of stains, paints, and inlays as further means of decoration; 2. Constructions and practices in larger work, such as bowls, lamps, columns, etc.; 3. Equipment for Wood Turning; 4. Courses in Wood Turning.

Fee: $4.00

1st Sem.; 2nd Sem.; S. S. Cr.: 2½ sem. hrs. qtr.

## CABINETWORK I AND II

(Cabinet or case and Furniture Making—Open or enclosed construction)

This is advanced woodwork the work being largely concerned with mechanic's workmanlike shop methods, sequence in operations, proportion, construction, analysis, organization, and management. Projects usually vary in a number of ways, but must lend themselves to the purpose of the work. Some are of the open type while others are of the enclosed, sanitary or base, type of construction. The enclosed type is also called case work. It is aimed to have some of both the open and enclosed work under construc-

tion for each class and to include a range in quality standards of workmanship which will provide for the occasional student who has ability, and painstaking patience to do fine work. Occasionally each member of the class makes the same kind of project, but both group and individual class organizations are generally provided with a variety of standards of skill and workmanship involved. This provides considerable choice in level of standards, ranging from that which is satisfactory for shop equipment to that which is satisfactory for residence furniture with considerable character. Full size shop working drawings, stock cutting bills with specifications, and models are generally provided by the instructor. However, work in shop drawing and stock billing is usually available for students who have had a reasonable amount of advanced woodwork. The work is of a practical productive nature and woodworking machinery is used as much as possible. Charts showing what cabinetmakers do and the sequence in their work are also provided. Prerequisites: Elements of Woodwork I and II and Millwork I. Cabinetwork I and II are prerequisites to III and IV.

Fee: $1.50 per quarter.

1st Sem.; 2nd Sem.; S. S. Crs.: 2½ each qtr.

## CABINETWORK III

(Selecting, designing and drawing Junior or Senior High School projects)

Principles of industrial arts design are studied and correlated with the work in this course. There is very little actual woodwork, except when it will aid in visualizing design, construction, or representation in drawing.

Consideration is first given to the range of experiences and abilities common to each year of industrial arts in secondary education, and to the time ordinarily available for completing one or more projects. With this in mind, suitable projects are considered and at least one is selected because it involves the best and most complete series of woodwork and cultural experiences. Consideration is next given to style, quality, cost, proportionate over-all measurements, proportionate sizes of members and spaces, con-

struction, building facilities, and ability of the instructor. The project is then designed and sketched, full size working drawings with cross-sections and details are made, and a bill of material is made out on a special blank form which requires a complete analysis and organization of the building of the project.

The drawings are made with contour and surface enrichment consistent with good design and with the time and ability of the best pupil in a given class. For pupils with less ability, the contour and surface enrichment may be modified or surface enrichment may be omitted entirely. To permit simplification, choice in style and less congestion in use of equipment, it is aimed to supplement the drawings with full size details of straight and tapered, turned, or scroll sawed parts. Prerequisites: Cabinetwork I and II. Cabinetwork III is a junior or senior subject and is prerequisite to IV.

Fee: $1.50 per quarter.

1st Sem.; 2nd Sem. Credits: 2½ per qtr.

## COOPERATIVE INDUSTRIAL WOODWORK

Opportunity will be avaliable for students who have completed the woodworking courses offered to secure practical experience in certain woodworking establishments off the campus. This work will enable students majoring in woodworking to secure experience in those phases of modern production in woodwork not easily represented in actual participation in the school. Through the meeting of certain requirements credit not to exceed 5 semester hours is available. Assignments to this work are made individually.

## CABINETWORK IV

(Junior–Senior Shop Work. Sr. Year Preferred)

In Cabinetwork IV each student may choose to build one or more projects which are typical of advanced senior high school woodwork, or he may choose to build one or more projects which are representative of high quality factory furniture that can be done in Normal School or College courses. Open, enclosed and semi-enclosed construc-

tion should be considered when making a choice. The open and semi-enclosed projects should be of the curvilinear style. Full size working drawings must be available at the beginning of the course. A detailed stock cutting bill should supplement the drawings, or be made out before the building process is begun. The drawings should show good proportion of the whole, its division and subdivisions in accord with fundamental principles of design and structural detail. The contour should be laid out accurately enough to permit direct transfer to patterns. A moderate amount of surface enrichment should also be shown. The student may bring his own drawings or choose from those available in the shop, but drawings which the student has made in Cabinetwork III are preferred. A liberal amount of freedom and privilege is permissible in this course as Millwork I, Cabinetwork I, II and III are prerequisite. A maximum of machine work is encouraged within the limits of the project, especially when it is of the type suitable for college students. The work is largely on a productive basis with individual instruction and has elements adapted to the contract plan.

Due to the nature of Cabinetwork IV, the work may be done any time during the school day of a regular or summer session quarter, but must be arranged with the instructor. The project becomes the student's property unless otherwise agreed on. Occasionally, a project is built in duplicate so that one may be left in the shop for a demonstration teaching model to supplement the working drawings. In cases of complex projects the stock may have been almost entirely machined according to industrial organization in some other class, leaving only the bench work, assembling and surface enrichment for individual work.

Fee: $1.50 per quarter; plus cost of material for student's project.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each quarter

## MILLWORK I

(Machine Woodwork)

This course is provided for the purpose of instruction and practice in the use and immediate care of woodwork-

ing machinery. Special emphasis is given to operating methods which are consistent with "Safety First" and practical mechanic's workmanlike results. Since the origin and development of woodworking machinery is logically based on analysis of practical hand woodworking methods, this course also broadens the association of ideas which will aid in analysis, organization, and management common to good teaching in hand woodwork. Part of the time is given to a study of kinds, classification, standardization, grading, and scaling of lumber, and the clerical routine which is associated with economic cutting of stock. Tests for case hardening, moisture content of lumber, atmospheric relative humidity and proportionate shrinkage of wood are covered. Logical routing sequence of operations in cutting stock, and what must be known and done to operate each respective machine, is given considerable attention. When a student's experience and ability in machine woodworking will permit, he is usually given typical millwork jobs in which construction work is included. Some time is given to analysis of machines so that students may become familiar with machine design; the names, location, adjustment, function, and alignment of parts. Power transmission, cutting angles and speeds which involve typical shop mathematics are also taken up with stress on the necessity and safety in keeping tools sharp. Some time is given to consideration of kinds of glue—preparation, care and use of glue—glue jointing and such gluing problems as are common in building up stock edgewise and flatwise. This course is a prerequisite to Millwork II and all advanced Cabinetmaking.

Fee: $1.50 Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each quarter

## MILLWORK II

Millwork II provides an opportunity for practical experience in the upkeep and repair of woodworking machinery. So far as time permits, it is typical of industrial millwrighting and it has a service value in keeping the machinery in good running and working condition. It involves jobs as follows: Saw fitting, knife fitting and set-

ting, belt splicing and care, machine adjustments, alignments, bearing work, machine setting, etc. Full working periods are supplemented with individual instruction, direction, and reference material which is available in the nature of a shop library and demonstration material. This work is offered in conjunction with other classes and in each quarter it is limited to not over four students who are majoring in woodwork. Prerequisite: Millwork I, and prearrangement with instructor in charge. Each student furnishes: Pocket size steel scale, and brown coveralls.

Fee: $1.50 Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## FURNITURE UPHOLSTERING

This course is planned for teachers of woodwork in high schools and vocational schools. The following topics indicate the nature of the work in the course: upholsterer's tools and equipment; materials used; cost of materials and equipment; making cushions; chair frame construction for upholstery; pad seat and pad back upholstering; the spring seat and spring back; curved back upholstering; study of leathers, tapestries and other coverings; planning and cutting the covering material; repairing upholstered furniture.

The work of the course will consist of the making of several exercises which give practice in many of the upholstering operations and processes. After making the exercises each student may upholster a complete chair or davenport for himself or work on chairs, settees, and davenports, provided for the purpose. Lectures and demonstrations will be given on topics indicated.

Fee: $4.00, Quarter. S. S. only. Credit: 2½ each qtr.

## WOOD FINISHING

The work offered in wood finishing covers in part the making of a series of panels of different woods and various finishes. The surfaces are stained, filled, varnished, and waxed or polished, showing the method and value of different types of finish as pieces of regular sequenced work. In addition to this, students are given practical work in painting, interior finishing, and the finishing and refinish-

ing of furniture, and also polychrome and tiffany finishes and stenciling. Studies are made covering the following: Preparation of the wood; stains and staining; production and use of different stains; formulae for making water, oil, and spirit stains; fuming; fillers and their compositions and use, methods of filling hard and soft woods, open and close grained woods; wax, its character and preparation, different uses; rubbing with sand paper, with pumice stone; polishing, use of curled hair; use of steel wool; selection and care of materials; commercial practice in wood finishing; suggestions for handling wood finishing in school shops.

Fee: $5.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## CARPENTRY I

Full sized cottage construction, together with such exercise work as may be necessary for the development of sufficient skill, is given in this course. Emphasis is placed on the operations and constructions that are different from those found in bench woodwork and that are fundamental in frame building construction. Detailed studies are made of floor framing, including: laying out, cutting, and setting sills, joists, bridging, headers, trimmers, laying sub floor, squaring and leveling the floor frame; wall framing, cutting and setting plates, studs, headers, trimmers, rib-band, and gable studs, plumbing and bracing walls, erecting scaffolding, and sheathing walls; roof framing, figuring, run, rise, pitch, and rise per foot, laying out with steel square the lengths and cuts, and cutting and setting common, hip and valley, jack, and cripple rafters; laying out and framing dormers and openings, sheathing roof, setting cornice finish, shingling, setting window and door frames, setting outside base and corner trim, spacing, cutting, and nailing siding; porch work. Workmanlike methods of application of processes are stressed.

The theoretical work given in connection with the tool processes and constructions includes a discussion of the braced and balloon types of frame, a comparison of various methods in framing floors, walls, and roofs, and a study of

various types of roofs and cornices by means of blackboard drawings. Lectures and demonstrations are given on the use of the steel square in laying out and spacing joists and studs and in laying out the lengths and cuts of rafters. Assigned outside reading is used in the classroom as a basis for discussions and reports. These cover some of the more important phases listed above in addition to kinds, sizes, grades, and prices of framing and finishing lumber, millwork, nails and builder's hardware, figuring and listing, problems pertaining to the teaching of carpentry in schools, and other details which can best be studied in this manner.

Fee: $2.00 qtr.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## BRICKLAYING AND CONCRETE WORK I, II, III, IV

Bricklaying is planned for the beginner or a more advanced student. All the jobs are of a practical nature. Lectures, mimeograph sheets and drawings are given to the student on problems that he would come in contact with if he were learning the trade. Both the organization of vocational school work and the demands for a high school course are kept in mind during the course. Demonstrations are given for all problems and minor details that come up during the process of building. Some outside work in the field is given where it is practical to do so and the student is capable of doing a workmanlike piece of work.

Estimating materials, and small job work is taken up. Analysis of the trade is given to the student in order that he may have a good working knowledge of the trade. The elementary course consists of spreading mortar, raising 4″ corners and walls; 8″ American and Flemish bond corners, and walls; chimneys—plain and ornamental; walling in a frame; turning segmental arches; pilastered walls, etc. A fireplace is built by each pair of students during the last two weeks of the course. Outside assignments are given to be reported in class. Notes are kept on classwork and outside assignments. Local brick plants are visited during operation.

Concrete work is given after the student has had some

practice in manipulating the tools used in masonry, and wishes to take concrete work instead of bricklaying. The course consists of building foundations, walks with footings, their design according to use, laying sidewalks, curb and gutters; fence posts; troughs; wash tubs; ornamental benches; steps; lighting standards; concrete rollers; bird baths; imitation marble, scayrolin, terrazza, etc. Outside work is planned when it is practical to do so. Lectures are given on the problems as they are taken up. Outside assignments are given to be reported upon in class. Notes are kept on all class problems and outside assignments.

Fee: $4.00 qtr.

2nd Sem.; S. S. Credits: 2½ each qtr.

## PATTERNMAKING

The course in Patternmaking is essentially a woodworking course and involves the making of patterns or models of machine parts which are to be cast in iron, brass, or aluminum in the foundry. Patterns may be made of any suitable material such as wax, plaster of paris, metal or wood. The patterns of this course will be confined to wood.

The work of this course may be classified under three headings: First: The making of the pattern layout, which involves the making of a full size drawing of a pattern on a board, from which measurements may be taken. This drawing differs from a machine drawing in that the pattern allowances for draft, shrinkage, and finish are taken care of. The patternmaker's problems are all solved in this layout. Second: The making of the pattern, which involves accurate bench and machine woodworking and woodturning. Third: The making of core boxes, in which sand cores are made in the foundry for the purpose of casting irregular shaped holes in casings. A careful study is made of the different types of pattern construction. The pattern principles are so closely allied to foundry principles that it is important to have the student ram some of his patterns in the foundry. Individual problems are assigned to the student as soon as he shows ability to handle them.

Fee: $3.50 qtr.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

# METAL TRADES

## MACHINE SHOP

The course in Elements of Machine Shop Practice I is organized around a group of projects or machine parts that will involve certain basic machine tool processes, their related technical information, and the relation of these processes to the occupations.

These projects involve a careful study of the construction and operation of such standard machine tools as the lathe, milling machine, drilling machine, shaper and grinding machine. A study of the shapes of the cutting tools, and how to grind, set, and operate them, is given careful consideration. Calculations are made to obtain the correct feeds and speed for cutting the various metals used in this course. A study is made of the materials and the characteristics and properties of these materials.

It is not the intention of this course to develop a high degree of skill, but rather to broaden the student's conception of machine shop work and to give him an insight into the technical information involved.

The three advanced courses, Machine Shop II, III, IV, review the spur gear principles covered in the elements course, and cover the work of spiral gearing, rack-cutting, worm and bevel-gearing. The study of grinding machines and operations involves internal and external cylindrical grinding, drill grinding, and cutter grinding. The advanced work of the lathe involves turning with the aid of a steady and follow rest, square and acme thread cutting, and tool making. The student is acquainted with the best texts and reference material available.

Fee: $3.50 qtr.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## GENERAL METALWORK I

General Metalwork I gives instruction in the organization and operation of classes in a general metal shop. Prob-

lems selected in the early part of the course are isolated problems in forging, oxy-acetylene welding and cutting, heat treatment of steel, machine shop, and sheet metal work. Later problems involving several of the above types of metal working are used. Prerequisites: Machine Shop I and Sheet Metal I.

Fee: $6.50

1st Sem.; 2nd Sem.; S. S. Credits: 2½ hrs.

## GENERAL METALWORK II

General Metalwork II is devoted to oxy-acetylene welding and cutting. A careful study is made of the common metals for the purpose of welding, the construction operation and maintenance of acetylene generators and tanks, the welding and cutting torches, high and low pressure gauges, acetylene and oxygen. The major part of the course is spent in the preparation and welding of the common metals. Prerequisites: General metalwork I.

Fee: $6.50.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ hrs.

## FOUNDRY

The work of the course in Foundry Practice may be classified under four headings. First: Molding, which involves cutting and tempering molding sand preparatory to ramming bench and floor molds. A careful study is made of the foundry principles involved in ramming a variety of patterns. Second: Core making which involves the making and baking of covers to be used in the molds, and the characteristics of the materials used. Third: Cupola practice, which involves a careful study of the construction and operation of the cupola and the handling and pouring of molten metal. An important factor in the successful operation of a cupola depends upon the judgment used in selecting, mixing, and melting pig iron and machinery scrap to secure machinable qualities in the castings made. Two or three heats of cast iron are taken off during the course. Fourth: The melting and pouring of brass and aluminum in a crucible.

Lectures and reference reading on the metallurgy of the foundry are given relative to the ingredients and properties of the metals made use of in the course.

Fee: $3.50 qtr.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## SHEET METAL WORK AND PATTERN DRAFTING

The course in Sheet Metal I covers the application of such fundamental principles as cutting, forming, seaming, notching, wiring, hemming, and soldering in the making of tinware, gutters, pipe intersections, cornice work, and problems pertaining to heating and ventilating.

Sheet Metal II is primarily a pattern drafting course. It includes the study of the different forms of triangulation as applied in the development of irregular fittings used in heating and ventilating work. Advanced work in mouldings and cornice work is given.

In Sheet Metal III much time is devoted to first class production and to the more advanced problems connected with heating, ventilating, sky-light work, metal window frames and sash, and architectural ornaments. In this course some time is devoted to the study of mensuration as applied to sheet metal work.

Sheet Metal IV is a course in advanced work which will help the individual student in teaching sheet metal in the junior and senior high school. Some time is devoted to the working of copper and brass and studying its application to various forms of sheet metal work.

Prerequisites: Sheet Metal I, II, III.

Fee: 1st and 4th qtrs. $6.00; 2nd and 3rd qtrs. $5.00.

1st Sem.; 2nd Sem.; S. S. Crs.: 2½ each qtr.

# OTHER SHOP COURSES

## PRINTING I

The work in the first nine weeks acquaints the student with the fundamentals of printing. It serves as a tryout course for the purpose of aiding the student to analyze his capablities and adaptability for this work. In addition to the technical and cultural training which it involves, it also develops an appreciation of the standards of printing products. The general outline is based upon the proper sequence with which the commercial shop operates, starting with straight composition at the type cases and includes such work as proof reading, imposition and lock-up, platen press work, and bindery operations. The shop work is supplemented by lectures where a detailed study is made of type, inks, stock, equipment, and approach to display problems.

Fee: $2.50.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ qtr.

## PRINTING II

The work in this course is a continuation of Printing I, and is intended to give the student an opportunity to develop skill as a shop mechanic. Typical commercial jobs of wide range are pursued with emphasis placed upon artistic results and high commercial standards. A graded set of projects is used which enables the student to progress from simple display to the most intricate forms of display composition. Much practical experience is gained by work on the weekly publication, which involves ad composition, newspaper makeup, and cylinder press work. The lecture periods are devoted to a study of typographic design and advanced shop problems. Prerequisite: Printing I.

Fee: $2.50.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ qtr.

## PRINTING III

This course is a more extensive shop course intended for the specialization of students who are preparing to teach this subject. The shop work is of a practical nature involving the production of the many school forms. A foremanship system is used in which each man serves as foreman over his fellow students for a period of time, and routes the jobs through the shop. Many of the higher forms of printing processes are practiced, such as three and four-color process printing, embossing, and cirkotyping, and other methods are studied and observed. The classes make a tour of Twin City printing establishments each spring for the purpose of observing work not possible in the school shop. The lecture work comprises a study of shop equipment, courses of study, and modern printing processes and problems. Prerequisites: Printing I, II.

Fee: $2.50.

1st Sem.; 2nd Sem.; S. S. Credit: 2½ qtr.

## PRINTING IV (Machine Composition)

Machine composition consists of an extended study of both Linotype and Intertype machines which are installed for teacher training. This course is divided between the mechanism and operation of the machines and is intended to give the students a working knowledge of machine composition. The students are not only taught to operate the machines, but are also prepared to care for the machines, make adjustments and repairs, and to give instruction. Owing to the limited number of machines this course is limited to students who have attained an above average grade in the preceding courses of printing.

Prerequisites: Printing I and II, or equivalents.

Fee: $3.00.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ qtr.

## SCHOOL PUBLICATIONS

School Publications is a course intended to equip the student for handling school periodicals as a part of his work as a printing instructor. The work is divided between

the newspaper, magazine, and school annual, and will take up the organization and operation of each. While emphasis is placed upon news writing and appreciation, such phases as organization, business management, and mechanical production are also studied and practiced. The practical application is in the production of the Stoutonia, the weekly newspaper, and the Tower, the school annual. The staffs for these publications are made up of students who have taken this course, so far as is possible.

1st Sem.; 2nd Sem.; S. S. Credits: 2½

## COOPERATIVE SHOP WORK

The cooperative plan for industrial shop experience for printing students has recently been introduced. Students who have completed Printing I, II, and III may acquire trade experience. This is of two forms: industrial training, where the student spends his time in some printing establishment away from school; and campus training, where the student gains his experience in the school shop, apart from regular class time. Both forms of this cooperative plan are now in force for printing students, and all students majoring in printing are urged to take advantage of this training. Credit not to exceed 5 semester hours can be earned when the work meets certain requirements. Assignments to this work are made individually.

## AUTO MECHANICS I, II, III

Auto Mechanics I covers the study, adjusting, testing, and repair of the different parts of the chassis without the motor. Some work is given on two and four cycle stationary gas engines. Auto Mechanics II deals with the various units of the motor. After the student has become familiar with the principles of operation, the adjusting and testing of motors, he is given some work in overhauling and repairing of motors. Auto Mechanics III covers automotive electrical practice, including ignition, starting, lighting, and battery building and repair.

Students are advised to take the courses in order. While Auto Mechanics I is not a prerequisite for Auto Mechanics

II, Auto Mechanics II is, however, a prerequisite for Auto Mechanics III. The work is laid out on the unit basis, each unit complete in itself, thus making desired selections possible. The shops are well-equipped for the work in the three courses in Auto Mechanics.

Fee: $2.00 Quarter.

1st Sem.; 2nd Sem.; S. S. Crs.: 2½ each qtr.

## ELECTRICAL WORK

Three nine-week courses are offered, Electrical I, II, and III. These courses must be taken in order as indicated. Electrical I takes up the essentials of electricity and deals largely with direct currents. The laboratory work is divided into seven units, i. e. wire splicing; Ohm's Law experiments; cells and batteries; signal circuits; simple light and power currents; house wiring (knob and tube) : direct current generator and motors.

The recitation work of Electrical II takes up a study of the essentials of alternating currents as applied to generation, motors, transformers, etc. The laboratory work includes practical conduit wiring, a study of the common types of armature windings followed by several winding exercises, and several tests on direct current generators and motors.

The Electrical III recitation work is a continuation of that taken in Electrical II. The Electrical III shop work consists of shop problems dealing with transformers and various types of alternating current motors and generators.

The general purpose of the three courses is to cover the probable initial work to be done in electrical courses in public schools together with the background of electrical theory necessary to properly organize and operate such courses.

Fee: $2.00 qtr.

1st Sem.; 2nd Sem.; S. S. Crs.: 2½ each qtr.

## ELECTRICAL IV (Radio)

The course consists of both shop and recitation work. The recitation work takes care of the fundamental electrical laws which apply to all radio circuits. The various detect-

ors are discussed and simple hook-ups studied. In the shop, simple circuits are constructed and tried out. It is expected that each student will construct a receiving set for himself. Equipment is at hand for shop practice in assembling hook-ups for transmitting apparatus. At present there is available a 20 watt radiophone, a 10 watt C. W. and necessary apparatus to assemble a 200 watt radiophone transmitter. The construction of radio power transformers is also a part of the recitation and shop work. The course is open to students who have completed Electrical I and II.

Fee: $5.00, Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

## HOME MECHANICS I

The object of this course is to prepare students for the handling of public school classes in the general shop. This is to meet the present rapidly increasing demand for such teachers. Selections of typical jobs necessary in the mechanical maintenance of the home are made the basis for shop assignments. These jobs are grouped according to the present day occupations represented in the upkeep of the home. Students in addition to their mechanical work, are required to make solutions of problems of management necessary to the successful operation of the general shop.

The Home Mechanics shop is a large well-lighted room with ample storage and locker space. Bench and mechanical equipment affords excellent opportunity for work in projects in woodwork, plumbing, electricity, woodfinishing, sheet metal repairs, and bench metal work. The shop has twenty fully equipped woodworking benches, with additional equipment for metal work. Sixty feet of general bench space is available for plumbing, electrical, sheet metal and general work. Typical home equipment is available for repair projects. The course is open to Sophomores, Juniors or Seniors who have completed elementary courses in bench woodwork, electrical, machine shop, woodturning, and mechanical drawing. It is essential also that the students be taking or have taken elementary sheet metal.

Fee: $5.00 Quarter.

1st Sem.; 2nd Sem.; S. S. Credits: 2½ each qtr.

# FOODS AND NUTRITION

## FOODS I

Food Selection

In the first course in foods the selection of food to suit the needs of the individual student is taken as a basis. A study is made of what food is and what it will do towards keeping the student in good health. The practical work is designed to illustrate the principles of food selection with enough work in food preparation to teach the processes best adapted to each type of food. Through the college cafeteria lessons are given in the selection of food at public eating places with emphasis on cost and suitable combinations. The value of forming good habits in the choice of foods is stressed and practical application is made to the needs of the individual student in the selection of her own diet.

Fee: $5.00. 1st Sem.; S. S. Credits: 3

## FOODS II

Food Preparation

In this course the preparation of food for the family is stressed. The practical work is planned to secure a thorough understanding of the theory and method involved in the cookery of the more essential foods. Sufficient repetition of processes is given to secure a fair degree of skill in manipulation of materials and utensils.

Among the subjects emphasized are: The choice and arrangement of appropriate garnishes, correct methods of service, comparison of recipes, substitution and variations, economical use of left overs, and adaptation of lessons to public school work. Costs and economy in the use of materials are emphasized. Meals for the day for various types of families are planned, prepared and served.

In both Foods I and II throughout the year, lectures are given and discussions held when occasion demands. Considerable reference work is deemed advisable, as it is one

of the aims of the course to bring students in contact with the newest and best books pertaining to this line of work.

Fee: $5.00. 2nd Sem. Credits: 3

## FOODS III

Economics and Marketing

A. Food Economics. The aim of this part of the course is to make a study of the production, distribution, and value of the world's present food supply; to compare these with past conditions and to discuss the possibilities and needs of the future in the matter of food resources. The work consists of class discussions, special reports, and reference readings.

B. Marketing. This unit of work includes a study of the problem of buying food supplies for the home and for the school foods department. Cost in relation to season, locality, quality and quantity purchased; how to judge grades and qualities of fresh, canned and package goods; types of markets; ethics of buying; and the food expense account are among the topics discussed. Field trips, exhibits and demonstrations as well as actual practice in buying will be included in the course.

Fee: $3.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

## FOODS IV

Food Preservation and Meal Planning

A. Food Preservation. This work has as its aim the acquisition of knowledge of the processes and theory involved in the various methods of preserving food, and skill in their use. The work will include: Canning by the different methods; use of the water bath, oven, steam cooker and pressure cooker; jelly making, conserves, and marmalade; pickling. The handling of this type of lessons in public school classes, the ways and means of obtaining supplies and disposing of products, other methods of food preservation occasionally used in the home, and available reference material are made the subjects of a series of discussions at the close of the work on food preservation.

B. Meal Planning, Preparation, and Serving. This part of the course is a continuation of Foods II. A short series of lessons on foods suitable for breakfasts, luncheons, suppers and dinners is followed by the planning and serving of meals by groups of two, three or four students. Opportunity is given to use the typical home kitchen in the preparation of family meals with emphasis on the food for the day rather than for the individual meal. Throughout this sequence, lessons are given to review the theory and processes of cookery. Other aims of this sequence are to give students added skill and rapidity in manipulation; to teach simplicity, appropriateness and good taste in table service. Orderly American family service is stressed. Nutrition I should be taken parallel and effort will be made to correlate the work in the two courses.

Prerequisites, Foods III, Organic Chemistry, Microbiology, Parallel Nutrition I.

Fee: $6.00. 1st Sem.; S. S. Credits: 3

## FOODS V

Advanced Problems in Meal Planning and Table Service

This course will include the planning, preparation, and serving of meals for special occasions as class banquets, buffet luncheons, afternoon teas, school picnics, etc. A series of lessons will be given on the handling of the school lunch by the home economics department when there is no cafeteria in the school and another series on the problems that arise in the teaching of home cookery and table service in public and vocational school classes. A number of lessons will be given to equip the students with a knowledge of some of the more elaborate processes of cookery and of the more unusual food materials and dishes.

Prerequisites: Foods IV.

Fee: $12.00. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## FOODS VI

Investigation Cookery

This is a course in laboratory investigation and testing for advanced students to enable them to determine further facts and gain information for practical use in food prepa-

ration, and to aid in placing cookery upon a more scientific basis. The work consists of a qualitative and quantitative study of recipes and a study of the uses of different food materials and of cookery apparatus. One-third of the course is given to class problems in investigation cookery. The remainder of the time is devoted to individual problems. This course is intended especially for mature students who have had some teaching experience or experience in commercial demonstrating. It is an elective and will be offered only when a sufficient number request it, the minimum number being six.

Fee: $6.00. S. S. Credits: 2

## LARGE QUANTITY COOKERY

This course is planned for those who wish to manage school lunchrooms, tea rooms, cafeterias, and hospitals. The work is based on the principles underlying the planning of menus for large numbers; standards for judging meals; types of menus; suggestive charts and lists to be used in menu planning; and the use of standardized recipes.

The laboratory work consists largely in knowledge and use of power machinery and large quantity recipes in cookery. The student is given opportunity to assist in directing the work of food preparation in the college cafeteria and is required to estimate the cost and to determine the selling price of same. Experience is given in the preparation of meats, of meat substitutes; of both stock and cream soups; the making of vegetable, fruit, and gelatine salads; pastry; hot breads, and desserts, etc.

Prerequisite: Foods III.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## NUTRITION I

The purpose of this course is to present the fundamental principles of human nutrition and their application to the feeding of individuals and family groups. It includes recitation and laboratory work and is designed to be used as a basis for practical work in dietetics as well as for organizing and teaching the subject. Sherman's "Chemistry

of Food and Nutrition" and Rose's "Handbook in Dietetics" are used as texts for much of this work, but are supplemented by reference readings. A study is made of the functions and nutritive value of foods; the food requirements of individuals and family groups; the feeding of infants and young children. One hundred calorie portions of foods are calculated and weighed; family dietaries and dietaries for children are planned with reference to nutritive needs and the cost in relation to the family income. These dietaries are prepared in the laboratory. Problems of interest to teachers of home economics are taken up in the class work. Among these are the place of dietetics in the school course, the selection of subject matter, the adaptation of material and methods of presentation; books and pamphlets suitable for reference and the application of dietetics to cookery. Prerequisites: Foods II, Organic Chemistry.

Fee: $3.00. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## NUTRITION II

This course treats of the food requirements of individuals from infancy to old age; digestion and metabolism; the functions of protein, fat, carbohydrate, ash constituents and vitamins. The most common disorders of nutrition are studied and scientific principles applied in the planning of corrective dietaries. This course supplements Nutrition I and offers a more intensive study of the subject. It is conducted by means of lectures, recitations, readings, and laboratory work. Prerequisites: Nutrition I, Physiological Chemistry.

Fee: $3.00. 2nd Sem.; S. S. Credits: 4

## PROBLEMS IN HEALTH EDUCATION

The purpose of this course is to afford opportunity for the practical application of the principles of nutrition in the teaching of children. Nutrition classes of malnourished school children are held; follow-up work in the homes is carried on; clinics are conducted in cooperation with a

local physician and the school nurse. When necessary corrective dietaries are planned and prepared. Conferences are held in which subject matter and methods are discussed. Prerequisites: Nutrition I or its equivalent.

Fee: $5.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

## DIET IN DISEASE

This course treats of the selection of diet in various disorders of nutrition. It is planned especially to meet the needs of hospital dietitians. The course is conducted by means of lectures, readings, and conferences.

Prerequisites: Nutrition II. 2nd Sem. Credits: 2 hrs.

## THE USE OF LABORATORY ANIMALS IN THE TEACHING OF NUTRITION

Students carry on individual problems in which they are given instruction in the handling, the feeding, and the keeping of records of such animals. Diets are selected with reference to practical needs. The course includes group conferences and reports.

Fee: $3.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

## SURVEY OF NUTRITION

The purpose of this course is to present the essentials of an adequate diet in the light of our more recent knowledge of nutrition, together with suggestions for teaching the subject. The importance of health education is stressed and opportunity given for observation of health classes. The course is conducted by means of lectures, readings, reports, and discussions. Prerequisites: Nutrition I; Experience in teaching Home Economics.

S. S. Credits: 2

# CLOTHING AND TEXTILES

## CLOTHING I

The subject matter of this course is based upon a study of underwear for the college girl. The following aspects are considered: wise selection of commercially made garments and comparison with home made as to durability, workmanship, design and cost; design and construction of simple under garments; economics of textile purchase; and hygiene. The practical work includes fundamental processes of elementary sewing, use and care of the sewing machine, and problems in care and repair of clothing.

Fee: $1.00. 1st Semester; S. S. Credits: 3

## CLOTHING II

This course is a continuation of Clothing I. The technical work consists of further work in the construction of plain clothing, the problems centering about the construction of a two piece sports costume. Flat commercial patterns are used as the foundation for simple designing. Students are required to keep personal accounts which are to be used as a basis for the economic study of budget making.

Fee: $1.00. 2nd Sem.; S. S. Credits: 2

## CLOTHING III

The course includes the study of commercial patterns, stressing the problems of alteration and designing from a foundation pattern. Emphasis is placed upon choice of appropriate lines, materials, and colors for individuals. High standards of work and details of technique are taught. The finished problems include a simple wash dress and a silk dress. The place of each in the high school or vocational school course of study and the methods of presenting the various phases of the work are developed through

discussion. The student furnishes all materials and supplies, subject to the approval of the instructor. A study is made of clothing budgets. Prerequisites: Clothing I and II, Color and Design I, Costume Design.

Fee: $1.00. 1st Sem.; S. S. Credits: 3

## CLOTHING IV

This is a continuation of Clothing III. Problems of the course are dependent upon the season of the year and the prevailing tendencies of the current mode but usually include a wool dress and a lingerie dress. The aims are greater independence and originality, greater skill in use and adaptation of commercial patterns and in handling different materials, speed in construction work, a broader understanding of the scope and content of subject matter in clothing, and increased ability to plan and organize work. The budget work is continued and is based on the professional woman's budget. The subject of color and line is reviewed and emphasized in relation to suitability to wearer and occasion. Further professional work is also included. Prerequisites: Clothing III, Color and Design I, Costume Design.

Fee: $1.00. 2nd Sem. Credits: 2

## CLOTHING V—ADVANCED CLOTHING CONSTRUCTION

This course aims to give opportunity for applying in a practical way the principles emphasized in Costume Design, and to give further practice in the construction of clothing.

All designs are developed by modeling in tissue paper or muslin on the dress form; later, these designs are carried out in actual material.

Content of courses and methods of instruction applicable to grades, high, and vocational school are discussed in relation to technical problems. Prerequisites: Clothing IV, Costume Design.

Fee: $1.00. 2nd Sem.; S. S. Credits: 4

## CLOTHING VI—CHILDREN'S CLOTHING

Since many teachers have to meet the problem of planning, making, and decorating clothing for young children, and since this line of work has in it elements of construction and principles of design that differ in a measure from those involved in the making of garments for adults, this course is open as an elective to students who wish to gain technique in this direction. So far as possible students are urged to make dresses for children who can come to the classroom to be fitted and for children varying in age.

Prerequisites: Clothing I, II and III.

Fee: $1.00. 2nd Sem.; S. S.; on demand. Credits: 2

## TEXTILES

The aims of this work, which is given in connection with the above courses, are to give students such knowledge of fabrics and textile materials as to enable them to select intelligently textile materials for school, household, and personal uses, to develop a social spirit with relation to the worker in the shop, and factories, and to help students to adapt and use their knowledge of textiles in the teaching of public and vocational school classes in clothing. A short study is made of the early history of the textile arts and of the causes which led to the present conditions in the textile industry. Then follows an intensive study of the fabrics made from the four principal fibers of commerce, with emphasis on those points which affect the wearing quality, prices, and uses. The student is guided in making a collection of samples of textile fabrics for classroom use. She is, through reference reading, made familiar with the literature of the subject.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## PROBLEMS IN RELATED SUBJECT MATTER IN CLOTHING

This course is designed: (1) To study and organize with reference to teaching definite sections of related subject matter, as dictated by the needs of the class members;

(2) To give a broader acquaintance with the methods which successful teachers have used in presenting this subject matter in public and vocational schools; and (3) To provide technical practice in representative problems in related art, hygiene, and economics of clothing, etc., so that each student may prepare illustrative material for use in the field. It is suggested that each teacher bring any unmounted illustrative material that she may have previously collected since it is often difficult to find equally valuable material on short notice.

Fee: $2.00. S. S. Credits: 2

## MILLINERY

The main purposes of this course are to teach the artistic, economic, and hygienic principles underlying the selection of hats; simple hat construction; and practical care and renovation of hats. Stress is placed upon the appropriateness of the hat for the occasion and the costume and its becomingness to the wearer. Prerequisite: Color and Design I.

Fee: $3.00. 1st Sem.; 2nd Sem.; S. S. Credits: 2

## RELATED ART

### COLOR AND DESIGN I

This course is intended to aid in the development of good taste in problems of life where color and form as well as utility are to be considered. Clothing, household accessories, as china, silver, glass, linen, lighting fixtures, pottery, etc., are examined to give breadth of experience and to establish the habits of using design principles as a guide to choice and arrangement. Emphasis is placed upon color harmony. Simple creative problems are executed.

The course includes lettering, posters, and graphic presentation of material for use in teaching.

Fee: $4.00. 1st Sem.; 2nd Sem. Credits: 3

### COLOR AND DESIGN II

This course is intended to enrich and broaden the content of course I. Emphasis is placed upon color and design principles as they apply to decoration. Appropriate and consistent enrichment of various materials used in the household arts is studied. Craft processes such as stencil, block-print, batik, and tie-dye are demonstrated with suggestive possibilities for the simple use of each in costume or in the home. Experiments are made in adapting these and other processes of enrichment to the needs of high school girls. A bibliography of related art is prepared. Prerequisite: Color and Design I.

Fee: $4.00. 1st Sem.; S. S. Credits: 3

### COSTUME DESIGN

This course makes specific application of the art principles to costume and aims to give an appreciative understanding of the meaning of artistic costume. A careful analysis of figure types, personal coloring, and personality

characteristics is used as the basis for the work. Textiles are studied with reference to the influence of texture and pattern on their use in costume. The professional work of the course includes the place and character of costume design in a high school course and the kinds and use of illustrative material available. Prerequisites: Color and Design I and Clothing I.

Fee: $2.00. 1st Sem.; 2nd Sem.; S. S. Credits: 3

## ADVANCED COSTUME DESIGN

This is a continuation of the course, "Costume Design and Clothing Selection", and provides for further interpretation and application of design principles, color, and texture to costumes for different personalities. The inspiration for greater originality is secured through a unit of work in historic costume. Designing of fancy dress costumes and costumes for plays and pageants is also included in the course. Prerequisites: Costume Design I, Clothing III.

Fee: $2.00. 2nd Sem. Credits: 2

## HOUSE PLANNING AND HOME FURNISHING

This course includes work in the study of domestic architecture and the judging of house plans as well as the application of the elements and principles of design to the practical problems of decorating and furnishing interiors. The work is designed to enable the student to apply economics principles in determining appropriate and artistic furnishings and decoration of a moderate priced home, and to select from the house furnishings now on the market, such as wall papers, rugs, furniture, draperies, the most artistic and the best for the money expended. The professional side of the work is considered throughout the course. Prospective students are urged to make a collection of magazine pictures which may be used to illustrate subjects included in the course.

Fee: $2.00. 1st Sem.; 2nd Sem.; S. S. Credits: 4

## ART HISTORY AND APPRECIATION

This course is intended to broaden the understanding and appreciation of things used today by making a brief survey of the most significant historic design periods of the past. Notable works in architecture, sculpture, painting, textiles, furniture pottery, etc., will be examined to discover how line, tone, and color have been used to produce beauty and to what extent the art of today is influenced by art of the past. Library readings, examination of prints and pictures, tracings in both line and color, and visits to local places furnishing illustrative material will be used as needed to develop judgment and taste.

Fee: $2.00. 1st Sem.; S. S. Credits: 3

# MANAGEMENT

## HOME MANAGEMENT AND PRACTICE HOUSE

The course in Home Management is designed to give students an insight into the organization and administrative work of the home through class discussion, and related practical work at the cottage. Budget making and account keeping are based on the work at the cottage. Sanitation, including heating, lighting, ventilation, plumbing, and the disposal of waste, are studied and discussed in their application to actual household problems. The house, as to its plan, construction, and equipment, is studied in its relation to initial expense, cost of maintenance, and efficiency in the work of the housewife. Consideration is given to the problem of organizing and adapting the subject matter, designated as Home Management, to the various courses in Home Economics given in the public or vocational schools.

Residence in the Home Management Cottage provides opportunity for managerial responsibilities in homemaking and housekeeping with the greater emphasis upon the former. The aim is development of appreciation, ideals and standards rather than skills. This work is required of all students taking Home Management.

Prerequisites: Foods IV, Nutrition I.

1st Sem.; 2nd Sem.; S. S. Credits: 5

## LAUNDERING

In this course the laundry problem is considered from the point of view of the housewife in connection with the house plan and the organization of work in the home and from the point of view of the teacher in connection with school equipment and the course of study. The work is based upon a knowledge of the textile fabrics, and of the chemical reaction involved in the use of reagents. The laboratory work gives practice in all the processes in wash-

ing and ironing cotton, linen, woolen, silk, laces, and embroideries. The planning of laundry equipment for school and home and the execution of the family laundry are among the problems considered. The work consists of discussions, demonstrations, and laboratory work.

Prerequisites: Chemistry II, Textiles.

Fee: $1.00. 1st Sem.; 2nd Sem. Credit: 1

## LUNCHROOM MANAGEMENT

The aim of this course is to acquaint the students with the managerial problems connected with the organization and operating of various types of lunchrooms. The size of rooms and utilization of floor space for efficient operation; purchasing and placing of large equipment; organization of work; number of employees needed; hours and duties of each employee; wages; problems of marketing, refrigeration and storage, including receiving, shelving, and issuing of stock; care of dining room, kitchen, and refrigerators; management of steam tables; setting up of counters; sizes of portions; garnishing and sales prices; and care of left over food are among the topics studied. Actual experience is given in assisting in the management of the financial side of the college cafeteria with a few hours of experience in each of the various phases of the work. Prerequisite: Foods III.

1st Sem.; 2nd Sem.; S. S. Credits: 2

## FURTHER INFORMATION

Inquiries regarding the purpose and character of work offered at The Stout Institute, the regular courses of study or those of the summer session, the Catalog, and other publications of the school; or inquiries regarding the qualifications of Stout graduates for the teaching of special subjects, should be addressed to

**President Burton E. Nelson,**
The Stout Institute, Menomonie, Wisconsin.

# INDEX


| | Page |
|---|---|
| Administrative Problems | 54 |
| Advantage of Continuous Attendance | 34 |
| Analysis and Organization of Home Economics in the Part-Time School | 51 |
| Art History | 110 |
| Athletic Coaching | 71 |
| Auditorium | 22 |
| Auto Mechanics I, II, III | 95 |
| Bacteriology of Foods | 63 |
| Basketball | 72 |
| Board of Trustees | 6 |
| Bricklaying | 88 |
| Buildings and Equipment | 19–23 |
| Cabinet Work I, II | 81 |
| Cabinet Work III, IV | 82 |
| Cafeteria | 31 |
| Calendar | 6 |
| Carpentry | 87 |
| Chemistry | |
| Industrial | 60 |
| Inorganic I, II | 60 |
| Organic | 61 |
| Physiological | 62 |
| Quantitative Study | 62 |
| Textile | 62 |
| Child Study and Training | 57 |
| Citizenship | 56 |
| Clothing | |
| Clothing I | 104 |
| Clothing II | 104 |
| Clothing III | 104 |
| Clothing IV | 105 |
| Clothing V | 105 |
| Clothing VI | 106 |
| Club Rooms | 20 |
| Color and Design I, II | 108 |
| Community Hygiene | 74 |
| Cooperative Work | 32 |
| Costume Design | 108 |
| Costume Design, Advanced | 109 |
| Courses of Study | |
| Industrial Arts | 38–42 |
| Household Arts | 42–44 |
| Credits | 25 |
| Credits, Advanced | 37 |
| Credits for Shop and Drawing Courses | 76 |
| Curricula | 23 |
| Demand for Graduates | 33 |
| Degrees | 37 |
| Dormitories | 30 |
| Drawing | |
| Mechanical, Elements of | 76 |
| Architectural Drafting I, II, III, IV | 77 |
| Machine Drafting I | 78 |
| Machine Drafting II | 78 |
| Machine Drafting III | 79 |
| Machine Drafting IV | 79 |
| Economics | 56 |
| Electrical Work | 96 |
| English | |
| Composition | 66 |
| Preparatory Composition | 66 |
| Advanced Composition | 67 |
| Literature Types | 68 |
| Contemporary Literature | 69 |
| Speech Correction | 67 |
| Enrollment | 25 |
| Expenses, Living | 31 |
| Faculty | 5 |
| Family and Society, The | 57 |
| Fees | |
| Laboratory, Library, and Shop | 26 |
| Examination, Special | 26 |
| Transcript | 28 |
| Fee for School Activities | 28 |
| Fee for Infirmary | 28 |
| Foods | |
| Foods I | 98 |
| Foods II | 98 |
| Foods III | 99 |
| Foods IV | 99 |
| Foods V | 100 |
| Foods VI Investigation Cookery | 100 |
| Football | 72 |
| Foundry | 91 |
| Furniture Upholstery | 86 |
| General Information, Historical | 15 |
| General Metal Work | 90 |
| Girls' Clubs and Their Organization | 58 |
| Gymnasium | 20 |
| History | |
| American | 64 |
| Contemporary | 65 |
| Industrial | 65 |
| Modern | 64 |
| History of Education | 53 |
| Home Economics Education | 54 |
| Home Furnishing and House Planning | 109 |
| Home Management | 111 |
| Home Mechanics | 97 |
| Home Nursing and Child Care | 74 |
| Household Arts Building | 22 |
| Hygiene and Safety | 71 |
| Industrial Arts Building | 19 |
| Large Quantity Cookery | 101 |
| Lunchroom Management | 112 |
| Laundering | 111 |
| Library | 26 |
| License | 23 |
| Location | 23 |
| Machine Shop | 90 |
| Materials of Construction | 60 |
| Mathematics | 59 |

| | Page |
|---|---|
| Methods of Teaching Home Economics in the Part-Time Schools | 51 |
| Methods in Industrial Arts | 46 |
| Microbiology | 63 |
| Millinery | 107 |
| Millwork I, II | 84 |
| Nutrition I, II Diet in Disease | 101 |
| Observation and Supervised Teaching | 48 |
| Officers of Administration | 5 |
| Organization of Industrial Arts | 46 |
| Part-Time School I | 50 |
| Part-Time Shop Methods I | 50 |
| Part-Time Shop Methods II | 51 |
| Patternmaking | 89 |
| Physics I | 59 |
| Physics, Household | 59 |
| Physical Education | 71 |
| Physiology and Hygiene | 71 |
| Principles of Education | 53 |
| Printing | 93 |
| Problems in Health Education | 102 |
| Problems of the Part-Time School II | 50 |
| Problems in Related Subject Matter in Clothing | 106 |
| Psychology I, II | 45 |
| Psychology of Childhood and Youth | 46 |
| Public Speaking | 68 |
| Purpose and Organization | 18 |
| Qualifications for Admission | 24 |
| Radio (Electrical IV) | 96 |
| Railroad Connections | 23 |
| Refunds | 31 |
| Regular Sessions, Enrolling | 34 |
| Residence Requirements | 24 |
| Scholarships | 27 |
| School Publications | 94 |
| Self-Support and Student Aid | 27 |
| Sheet Metal Work and Pattern Drafting | 92 |
| Sociology | 56 |
| Special Methods in Home Economics | 49 |
| Special Students | 24 |
| Stout Student Association | 28 |
| Student Loan Fund | 27 |
| Summer Session, General Information | 35 |
| Survey Course in Home Economics | 55 |
| Swimming | 73 |
| Tea Room | 31 |
| Teaching Industrial and Vocational Subjects | 47 |
| Technique of Teaching | 47 |
| Textiles | 106 |
| Trades Building | 21 |
| Trustees, Board of | 6 |
| Tuition, Regular Session | 25 |
| Uniforms | 32 |
| Use of Laboratory Animals | 103 |
| Vocational Education | 52 |
| Vocational Guidance | 52 |
| Woodfinishing | 86 |
| Woodturning | 81 |
| Woodwork, Elements of | 80 |
| Woodworking, Machine | 84 |
| Y. W. C. A. | 21 |

## CALENDAR FOR 1927–28

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**Twenty-second Annual Summer Session begins**
**June 20, 1927—Ends August 19, 1927**

**Twenty-fifth Regular Session begins**
**September 6, 1927—Ends May 25, 1928**

**First Semester ends January 20, 1928**
**Second Semester begins Jan. 23, 1928**

**Holiday Vacation begins December 17, 1927**
**Classes resume on January 3, 1928**

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